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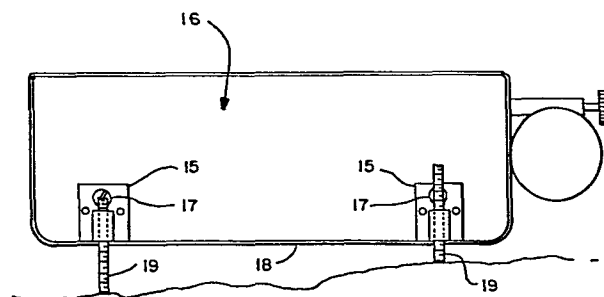
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(54) Bracket adaptable for mounting to a flat, vertical surface of an appliance.

(57) A bracket is provided which is adaptable for mounting to outdoor appliances (18), such as outdoor camping stoves, which bracket is adapted to accommodate threaded elongated means (19) for leveling said appliance (18) upon an irregular surface. Preferably the brackets, threaded elongated bolts (19) and screws (17) for attaching the brackets to the appliance (18) are provided in a kit having a plurality of each sufficient in number to provide a complete leveling apparatus for an appliance.



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BRACKET ADAPTABLE FOR MOUNTING TO A FLAT, VERTICAL
SURFACE OF AN APPLIANCE

- This invention relates to a bracket adaptable for mounting to a flat, vertical surface of an appliance, and further adapted to accomodate a threaded elongated means for leveling said appliance upon an irregular surface, especially
- 5 to an apparatus for attaching to a conventional outdoor appliance to provide a means for raising said appliance to be supported by adjustable legs in order that the appliance be leveled when placed on an irregular surface, and particularly to a stove jack apparatus.
- 10 When using an outdoor appliance, and in particular an appliance such as a conventional gas cooking stove (Coleman, Primus or Hillary), it is necessary to level the stove so that pots and pans and the contents thereof which are placed upon the stove will remain level during the cooking
- 15 period. Since such conventional stoves have a flat underside, the only convenient way for leveling the stove is to place the stove itself on a level, even surface. However, under camping conditions, this is usually not possible, and therefore the surface beneath the stove must be built
- 20 up with stones, wood chips, etc. in order to level the stove. Often, during cooking the agitation caused by the boiling of water and stirring of the contents of the pots and pans cause movement of the stove, therefore requiring a more difficult leveling procedure while the stove is hot
- 25 and while the pots and pans are full.

It is the object of the invention, to avoid the inconvenience of leveling the stove, and for additional safety, to provide a convenient means for leveling the stove on an irregular surface.

5 This object is obtained by a rectangular plate having substantially equal length and width and a thickness from about one-eighth to one-tenth of said width, said plate having securely attached to one surface thereof an elongated rod means, said rod means located equidistant from each
10 lateral edge of said plate and said rod means having the lower end thereof aligned with the lower edge of said plate, whereby the central axis of said rod means is perpendicular to said lower edge of said plate and parallel to said surface; said rod means having a threaded hole extending
15 through its entire length and concentric with said central axis, the length of said rod means being about one-half the length of said plate and the maximum width of said rod means being about one-third of the width of said plate; said plate having at least one hole located approximately equidistant
20 from each lateral edge of said plate, said hole having a central axis perpendicular to the surface of said plate. Advantageously said hole in said plate is located approximately equidistant between the top end of said rod means and the upper edge of said plate. Conveniently said plate
25 has two additional holes, each said hole located approximately equidistant between the upper edge and lower edge of said plate. Preferably said rod means is rectangular of a length of about one-half the height of said plate and a width of about one-third the width of said plate. Especially
30 the height of said plate is about 35 mm, the width of said plate is about 38 mm, and the thickness of said plate is about 3,2 mm, the height of said rod means is about 19 mm and the width of said rod means is about 13 mm.

The invention comprises also a kit having a plurality of
35 brackets and a plurality of elongated threaded headless bolts adapted for threading into said threaded hole in said

rod means, a plurality of screws of a diameter sufficient to fit through said hole in said plate, and a plurality of speed nuts.

Preferably the kit comprises four each of said brackets and
5 said threaded elongated headless bolts.

The present invention provides a bracket adaptable for mounting to a flat vertical surface on an appliance, such as an outdoor cooking stove, which bracket is adapted to accomodate a threaded elongated means, such as an elongated
10 headless bolt, which is used to adjustably raise and level the appliance. It is preferred that the brackets be combined into kits of four each of a bracket and elongated headless threaded bolt, and a plurality of conventional sheet metal screws and speed nuts so that a bracket may be mounted
15 at each corner of a conventional outdoor stove. Each of the threaded elongated bolts may then be adjusted to level the stove on an irregular surface.

The invention is further explained by means of an embodiment shown in the drawings.

20 Referring to FIGURES 1A, 1B and 1C there are shown front and side elevations and a plan, respectively, of a bracket means for attachment of the jacking and leveling apparatus to a stove according to the present invention.

Referring to FIGURE 2, there is shown the stove jack
25 apparatus according to the present invention attached to a conventional outdoor cooking stove.

Referring to FIGURES 1A and 1B there is shown a bracket means according to the present invention. The bracket comprises a rectangular plate 10 having its height substantially equal
30 to its width and a thickness from about 1/8 to 1/10 of said width. Preferably said height is about 35 mm, said width is about 38 mm and said thickness is from about 3,2 mm.

Plate 10 has securely attached to one surface thereof elongated rod means 11 located equidistant from the vertical edges of plate 10 and aligned with the lower edge 12 of plate 10. Rod means 11 has a central axis perpendicular to edge 12. As shown, rod means 11 is cylindrical in form, however it may be in other geometric shapes such as a rectangular rod, hexagonal rod, etc. Rod means 11 may be securely attached to plate 10 by welding, glue, brazing, and the like. Referring to FIGURE 1C, rod means 11 has a vertical centrally located threaded hole 13 extending through the entire length of rod 11 and having an axis concentric with the central axis of rod 11. The length of rod 11 is about one-half the height of plate 10 and the maximum diameter of rod 11 is about one-third the width of plate 10. Preferably the height of rod 11 is about 19 mm and the width is about 13 mm. Plate 10 has a hole 14 located approximately equidistant from the top end of rod 11 and the upper edge of plate 10. Hole 14 is located equidistant from each side edge of plate 10 and hole 14 has its central axis perpendicular to the surface of plate 10.

Plate 10 also has holes 14A located approximately equidistant between the upper and lower edges of plate 10 and approximately equidistant between the respective side edge of plate 10 and outer edge of rod 11. It is necessary that plate 10 has at least one hole 14, preferably located approximately equidistant from each lateral edge of plate 10, such hole having a central axis perpendicular to the surface of plate 10. However, additional holes 14A allow 10 to be adaptable for mounting onto substantially all conventional outdoor cooking stoves. If a conventional stove (Coleman) is used, the lower edge of rod means 11 will be flush to flange 18 as shown in FIGURE 2. In such a case, only a single hole 14 is necessary in order to securely fix the orientation of 10 on the stove.

However, in some stoves, flange 18 may not be present and at least two mounting holes are necessary in order to fix

the orientation of 10 on the stove. In such a case, it is necessary that holes 14A be utilized to mount 10 to the stove. The versatility of 10 is therefore increased if holes 14 and 14A are all present so that they may be utilized as needed according to the particular stove.

Holes 14 and 14A may be threaded, but are preferably unthreaded and of a diameter sufficient to accomodate a conventional sheet metal screw.

Plate 10 and rod 11 may be made of metal, such as iron, steel, aluminium, brass and the like and may be joined by heliarc welding, brazing or other suitable metal to metal bonding means. However, plate 10 and rod 11 may be made of any hard material, such as plastic, fiberglas, and the like, in which case they may be joined by glue, particularly thermo-setting glue, which provides a strong permanent bond.

Referring to FIGURE 2 there is shown a pair of brackets attached to a conventional stove (Coleman). The brackets 15 are attached to the vertical surface of the stove 16 by conventional sheet metal screws 17. The brackets are specifically designed so that the lower edge of rod means 11 is flush to flange 18 of the stove. Elongated threaded headless bolts 19 are threaded into the holes 13 of the brackets and may be adjusted up or down in order to level the stove.

CLAIMS

1. A bracket adaptable for mounting to a flat, vertical surface of an appliance (16), and further adapted to accomodate a threaded elongated means (19) for leveling said appliance (16) upon an irregular surface, comprising:

a rectangular plate (10) having substantially equal length and width and a thickness from about one-eighth to one-tenth of said width, said plate (10) having securely attached to one surface thereof an elongated rod means (11), said rod means (11) located equidistant from each lateral edge of said plate (10) and said rod means (11) having the lower end thereof aligned with the lower edge (12) of said plate (10), whereby the central axis of said rod means (11) is perpendicular to said lower edge (12) of said plate (10) and parallel to said surface;

said rod means (11) having a threaded hole (13) extending through its entire length and concentric with said central axis, the length of said rod means (11) being about one-half the length of said plate (10) and the maximum width of said rod means (11) being about one-third of the width of said plate (10);

said plate (10) having at least one hole (14) located approximately equidistant from each lateral edge of said plate (10), said hole (14) having a central axis perpendicular to the surface of said plate (10).

2. A bracket according to Claim 1 wherein said hole (14) in said plate (10) is located approximately equidistant between the top end of said rod means (11) and the upper edge of said plate (10).

3. A bracket according to Claim 2 wherein said plate (10) has two additional holes (14A), each said hole (14A) located approximately equidistant between the upper edge and lower edge (12) of said plate (10).
- 5 4. A bracket according to Claim 3 wherein said rod means (11) is rectangular of a length of about one-half the height of said plate (10) and a width of about one-third the width of said plate (10).
- 10 5. A bracket according to Claim 2 wherein the height of said plate (10) is about 35 mm, the width of said plate (10) is about 38 mm, and the thickness of said plate (10) is about 3,2 mm, the height of said rod means (11) is about 19 mm and the width of said rod means (11) is about 13 mm.
- 15 6. A kit comprising a plurality of brackets according to one of the preceding claims, wherein a plurality of elongated threaded headless bolts (19) is adapted for threading into said threaded hole (13) in said rod means (11), a plurality of screws (17) of a diameter sufficient to
20 fit through said hole (14, 14A) in said plate (10), and a plurality of speed nuts.
7. A kit according to Claim 6 wherein said kit comprises four each of said brackets and said threaded elongated headless bolts (19).

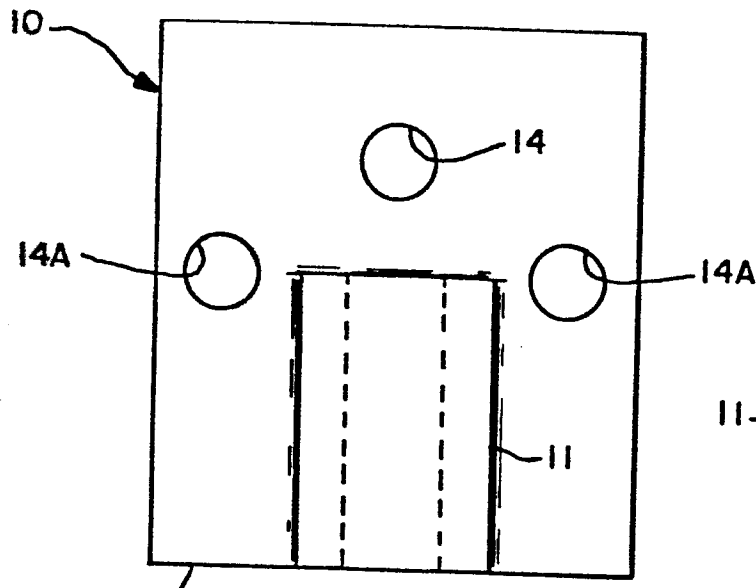


FIG.—1A

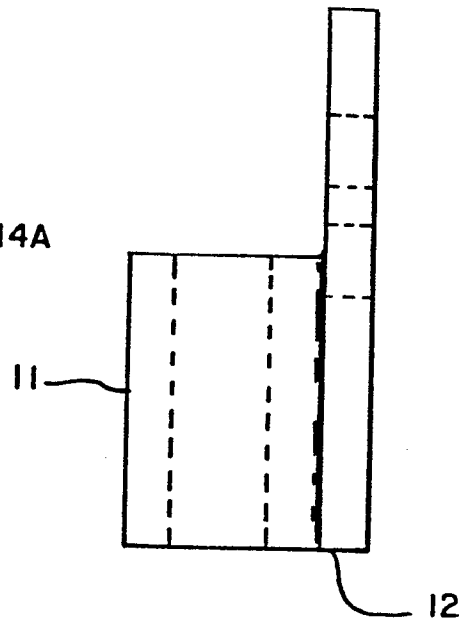


FIG.—1B

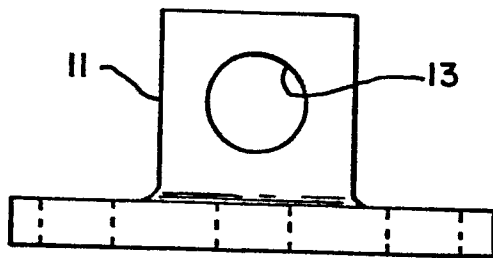


FIG.—1C

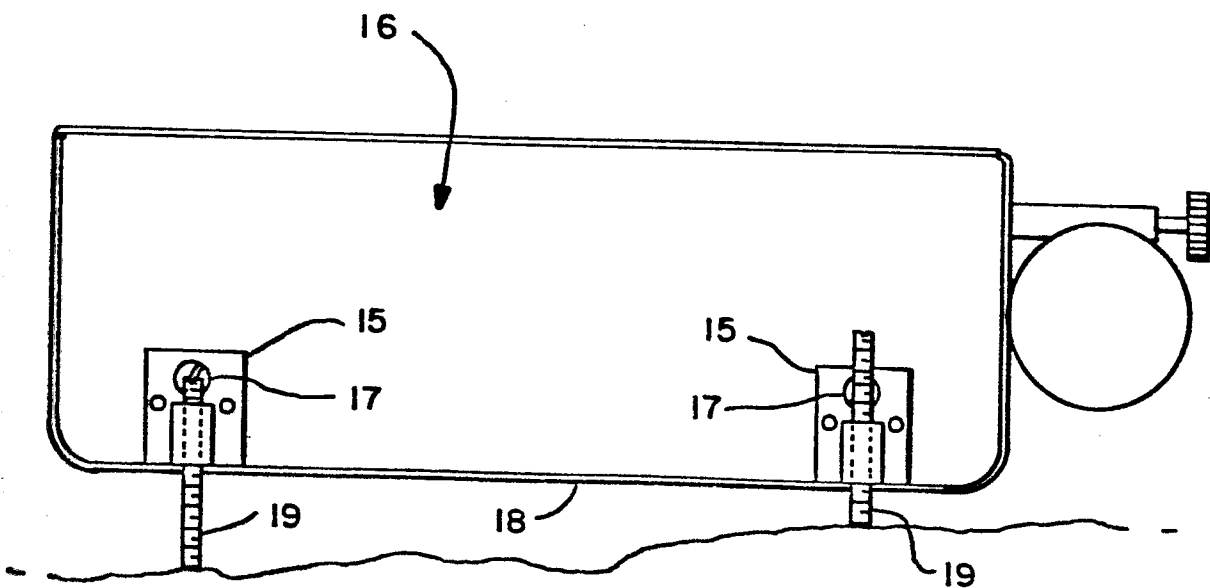


FIG.—2