Dec. 21, 1965 E. O. SCHWEITZER 3,224,594

JAR MOUNTING DEVICE

Filed Jan. 23, 1964

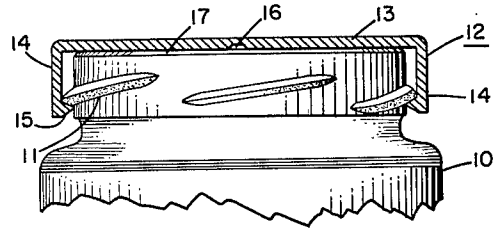


FIG. 1

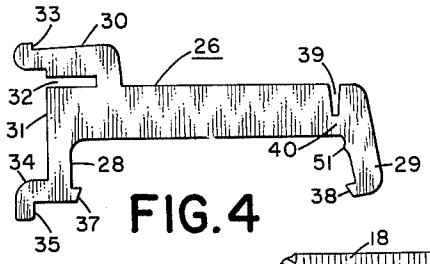


FIG. 4

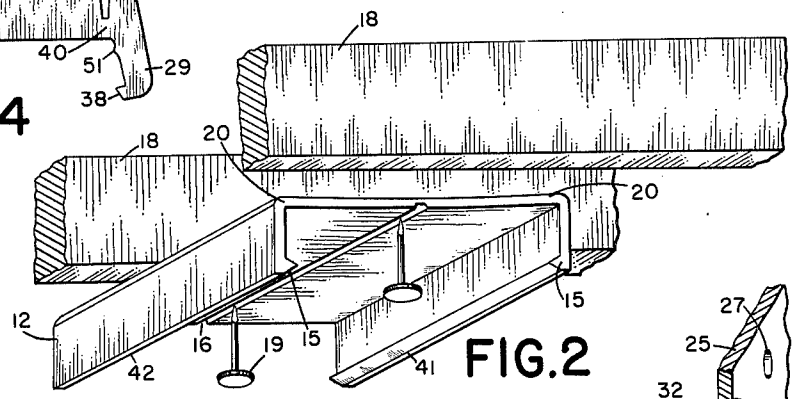


FIG. 2

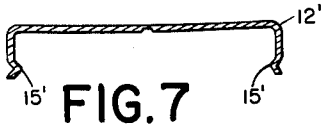


FIG. 7



FIG. 3

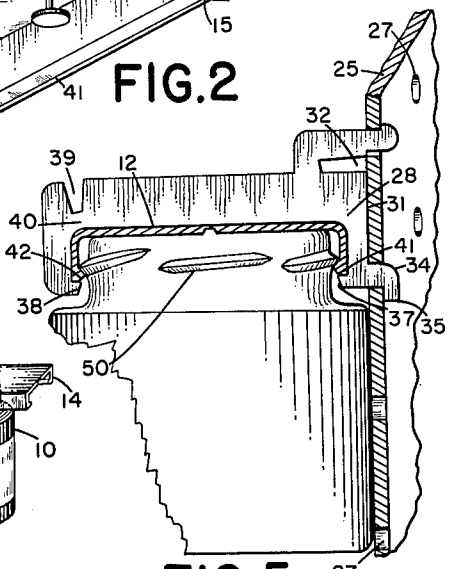


FIG. 5

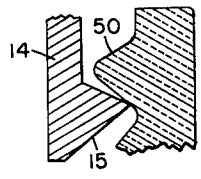


FIG. 6

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JAR MOUNTING DEVICE

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This invention pertains to a jar mounting device, and more particularly to a device for mounting screw-type jars to a wall or ceiling.

Most homes have jars of nails, screws, washers, etc., in their basements and workshops, and in most homes the jars are merely resting on a shelf or on a table where they take up space better used for other purposes. In some better organized homes jar tops are nailed up against ceiling joists and the jars are screwed into the permanently mounted top when it is desired to store the jar out of the way.

The present invention relates to a mounting strip which may be nailed or screwed across several floor joists and into which a plurality of jars, such as baby food jars, may be screwed in closely spaced, side-by-side relation. The present invention also relates to a special mounting clip whereby the jar strip may be secured to a vertically positioned sheet of Peg Board or the like; Peg Board being a sheet of material through which there are a large number of holes on vertical and horizontal lines. The clips of the present invention connected through the holes and secure the mounting strip which holds the jars.

It is an object of the invention to provide a mounting strip for screw type jars wherein a jar may be screwed up into the strip at any location along the entire length thereof by a simple twist of less than 90°.

Another object of the invention is to provide a jar mounting strip which may be nailed or screwed to ceiling joists, ceilings, etc., or which may be mounted on a vertically extending sheet of Peg Board.

Still another object of the invention is to provide a jar mounting strip and a clip device for securing the strip to a Peg Board.

It is an object of the invention to provide a jar mounting strip and a clip for securing it to a Peg Board and to so proportion the two elements that the Peg Board is used as a vertical guide to assure that the screw threads at the jar top cannot get cross-threaded in relation to the mounting strip.

Still another object of the invention is to provide a strong, channel-shaped jar mounting strip wherein the legs of the channel greatly strengthen and stiffen the strip and form, in effect, straight threads the length of the strip so that at any location along the length thereof a jar may be screwed into engagement therewith.

Another object of the invention is to provide a jar mounting strip for threaded engagement with glass threads on jars, and wherein even severe tightening of the jar into the strip does not cause chipping of the glass threads.

It is another object of the invention to provide a channel-shaped jar mounting strip which permits easy insertion of a jar between the legs of the channel, and as the jar is screwed into position the channel legs firmly close in against the jar.

Still another object of the invention is to provide an inexpensive, readily mounted clip for connecting the jar mounting channel to a Peg Board in such a manner that the weight of a large number of jars mounted on the strip has very little tendency to pull the mounting clips out of the Peg Board.

For a better understanding of the present invention, together with other and further objects thereof, reference is had to the following description taken in connection with the accompanying drawings, and its scope will be pointed out in the appended claims.

In the drawings:

FIGURE 1 is a side view, partially in section, showing the neck of a screw type jar being held in the jar mounting strip of this invention.

FIGURE 2 shows how the jar mounting strip may be nailed to ceiling joists or the like.

FIGURE 3 shows how a plurality of jars may be mounted side by side in the jar mounting strip.

FIGURE 4 is a side view of a special clip which is designed for mounting the jar strip to a vertically extending sheet of Peg Board.

FIGURE 5 is a side view, partly in section, showing the clip of FIGURE 4 and how it is secured to the jar mounting strip.

FIGURE 6 is an enlarged detail view showing the engagement of the mounting strip with the thread on the glass jar.

FIGURE 7 is a cross-sectional view of a slightly modified form of mounting strip.

With reference to the drawing there is shown in FIGURE 1 the top portion of a glass jar **10** having around its neck four integral glass threads **11**. The usual four and seven ounce baby food jars are ideal for use with this invention, and either will fit into a given mounting strip since they have the same size necks. The mounting strip **12** of the present invention is shown in threaded engagement with the neck of the jar **10**. The jar mounting strip **12** preferably is made of extruded aluminum, though other materials may also be used, as shown in FIGURE 7 wherein a formed sheet metal strip **12** is shown.

The preferred form of the mounting strip is to have it channel-shaped with the center portion of the top edge **13** bowed slightly toward the mouth of the jar **10** in its natural shape, and having two equal length leg portions **14** extending away from the top edge **13**, forming therewith a strong, rigid channel member. At the lower edge of each of the two leg portions **14** there is an inwardly extending lip **15** which runs the full length of the channel-shaped jar supporting member **12**. These lips **15** engage the screw threads **11** which extend outwardly from the glass jar, and form, in effect, straight screw threads which extend the full length of the mounting member **12**. Preferably at the center of the top edge **13** there is a groove **16** which extends the full length of member **12** to facilitate nailing or screwing the member to a ceiling or the like. When the jar holding strip is connected to a ceiling, the fastening device should not flatten the slight natural bow which is present in the top edge **13**. Thus the downwardly extending legs **14**, **14** will be slightly spread, aiding in the insertion of the jar between the lips **15**. A slight turn of the jar causes the top edge **17** of the jar to engage the downwardly bowed top edge **13**, and subsequent further turning causes the top edge **13** of the mounting channel to straighten and the downwardly extending legs **14**, **14** to swing inwardly against the jar neck, thereby firmly holding it. Thus the initial slight bowing of the top edge **13** facilitates insertion of the jar and assures a tight grip when the jar is turned less than 90° FIGURES 2 and 7 show the bow in the channel members **12**, **12'**, and FIGURES 1 and 5 show how the bow flattens as the top of the jar **10** engages it.

FIGURE 2 shows the mounting strip **12** in position to be nailed to ceiling joists **18** with spaced apart nails **19**. The channel **16** facilitates penetration of the nail or screw and provides a center line of the strip **12**. A further feature of the slightly bowed upper edge **13** of the mounting strip **12** is that when the device is ceiling mounted, the outer edges **20** engage the ceiling and prevent a rocking action about the nail as a pivot. In a ceiling mounted device the jars can be inserted side-by-side and touching each other. There is adequate space for a person to

grasp any given jar, give it a 90° turn and easily withdraw it from the channel member **12**. When the mounting strip **12** is mounted on a vertically positioned Peg Board **25**, by a plurality of mounting clips **26**, as shown in FIGURE 5, the jars should not be touching each other. If they are closer than finger width together it is difficult, due to the presence of the vertical wall, to grasp an individual jar and turn it.

Perforated panel board has a large number of vertically and horizontally spaced holes **27** into which metal hooks or plastic fasteners are connected.

In the present invention a special clip **26** is provided which, from the side, looks substantially channel-shaped with downwardly extending leg portions **28** and **29**. Integrally connected to its upper edge is an upper connecter device **30** which extends outwardly beyond the left-hand edge **31** of the clip **26**, as shown in FIGURE 4. A slot **32** exists between the connector **30** and the body of the clip **26**, and the outer end of the connector **30** has an inwardly facing shoulder portion **33**. The left-hand leg **28** has a portion **34** which extends beyond the edge **31** and it is provided with a shoulder surface **35** which is aligned with shoulder **33** on the connector **30**. Further, the leg **28** has an inwardly extending spur **37**. The other leg **29** slopes outwardly away from leg **28** and has an inwardly extending spur **38**. In the upper portion of the clip **26** near the leg **29** is a slot **39** so that the portion **40** of the clip **26** is reduced in strength.

To mount the clip **26** in a Peg Board, as shown in FIGURE 5, the portion **34** of the leg **28** is inserted through a hole **27** and then the end of the connector portion **30** is inserted into another hole **27**. A screwdriver is inserted in slot **32** and the outer end of the connector is bent upwardly until the shoulder **33** engages the back surface of the Peg Board. Shoulder **35** also engages the back of the Peg Board, and the edge **31** of the clip **26** engages the front face of the Peg Board. This securely holds the clip **26** to the Peg Board **25**.

The jar engaging channel member **12** may be positioned in several of the clips **26** either before or after the clips are mounted on the Peg Board.

The channel member **12** is inserted into each clip so that its lowest edge surface **41** is supported on the spur **37**, and its other lowest edge surface **42** is at the same height as the spur **38**. A screwdriver is then inserted in slot **39** and the slot is opened, causing a bending at the reduced portion **40** and causing the spur motion **38** to securely engage and hold the channel member **12**.

It is a simple procedure to push a glass jar such as a four or seven ounce baby food jar up into the channel and to turn the jar about 90°. The screw threads **50** integral with the jar engage the lips **15** which act as straight "threads" extending the full length of the channel member **12**. Thus the jar can be inserted at any location, turned slightly, and it is held tightly in place. The jar is not inserted lengthwise of the channel member. To do so would require moving many jars each time one was to be removed. When the open lip or upper edge of the glass jar engages the underneath surface of the channel member **12** it straightens out the slight bow which is shown in FIGURE 2, thereby causing the legs **14** to swing slightly toward each other and to snugly engage the neck of the jar below the glass threads **50**.

FIGURE 6 shows a detail of the engagement. It is preferable that the lips **15** of the channel engage underneath the thread **50**. This prevents chipping of the glass threads. In order to achieve this the angle of the inwardly directed top surface of the lip **15** should be about 30° or less from a line normal to the leg. The lower surface of the lip **15** preferably is sloped upwardly and inwardly to aid in guiding the mouth of a jar into proper position.

The channel member **12** may be made of extruded aluminum, as shown in FIGURES 1, 2 and 5, and no subsequent machining is necessary to form it. The channel member **12'** shown in FIGURE 7 is made of formed sheet steel of a light gauge. It has lips **15'** which function the same as the lip **15** on the extruded aluminum member **12**. The clip member **26** shown in FIGURE 4 has an outwardly extending projection **51** on the inside face of leg **29**. When the clip is secured around the channel member **12** the projection extends slightly into the soft aluminum metal and secures the clip and the channel together against longitudinal displacement.

While there have been described what are at present considered to be the preferred embodiments of this invention, it will be obvious to those skilled in the art that various changes and modifications may be made therein without departing from the invention, and it is, therefore, aimed in the appended claims to cover all such changes and modifications as fall within the true spirit and scope of the invention.

I claim:

1. A jar holding strip for holding a screw top jar having a neck of a given outer diameter with integral discontinuous screw threads thereon, comprising, an elongated channel member having a substantially planar central portion and downwardly extending leg portions at either side thereof forming in cross-section a generally channel-shaped member, said leg portions terminating in inwardly directed V-shaped lips for engaging and gripping screw threads on the neck of a jar, the distance between the terminal edges of said lips dimensioned to be greater than the outer diameter of the neck of a jar and less than the outer diameter of the neck of a jar measured through the screw threads, a jar being insertable into said channel-shaped member in a direction substantially perpendicular to the said plane central portion whereby the jar neck will clear the V-shaped lips but the screw threads will not, a jar upon being turned threading up into said strip as the V-shaped lips threadingly engage between discontinuous threads on a jar neck.

2. A jar holding strip as set forth in claim **1**, further characterized by said inwardly directed lips extending unbroken the full length of said channel member.

3. A jar holding strip as set forth in claim **2**, further characterized by said inwardly directed lips being tapered inwardly forming an upper surface at an angle of about 30° to the horizontal for engaging the underneath surface of the threads on the neck of a jar, and forming a lower surface which slopes upwardly and inwardly to facilitate insertion of the neck of a jar.

4. A jar holding strip as set forth in claim **2**, further characterized by the said central portion being bowed inwardly between said legs and whereby upon tightening of a jar neck against the underneath surface of said central portion, the bow therein is reduced and the legs tend to come together, establishing a tight frictional grip on the jar neck.

5. A jar holding strip as set forth in claim **4**, further characterized by a narrow centerline groove in said central portion extending the length thereof parallel to said legs to facilitate fastening said strip to an overhead beam.

6. A jar holding strip as set forth in claim **4**, further characterized by the depth of said channel member from the said underneath surface to the said inwardly directed lips is directly related to the distance from the lip of a screw type baby food jar to the threads thereon.

7. A clip for fastening a jar holding strip to a perforated panel comprising a flat planar clip formed of permanently deformable material and having a central portion and two integral downwardly extending legs terminating in strip-engaging members, one end of said clip having two panel board engaging fingers integral therewith and extending away from the central portion of said clip, said clip at said one end having a slot between said panel engaging fingers to facilitate permanent deformation of said clip whereby to spread apart said two fingers after they have been inserted in said panel board.

8. A clip as set forth in claim **7**, further characterized

by one of said fingers being bendable within the plane of the clip in relation to said central portion to facilitate locking said clip to a panel board.

9. A clip as set forth in claim 8, further characterized by there being a slot between said one finger and said central portion to facilitate said bending.

10. A clip as set forth in claim 7, further characterized by said central portion having a notch therein located inwardly from the leg opposite said one leg establishing a narrow neck portion bendable within the plane of the clip to facilitate the clip gripping the jar holding strip.

11. A clip as set forth in claim 7, further characterized by there being a slot between said one finger and said central portion to facilitate said bending.

12. An assembly to mount screw top baby food jars to a vertically extending panel board, comprising, in combination, a panel board, an elongated jar holding strip member having a central portion and downwardly extending leg portions at either side thereof forming in cross-section a generally channel-shaped member, the said leg portions away from said central portion terminating in inwardly directed edges; a clip for fastening said strip member to said panel board, said clip having a central portion spanning said strip member and extending perpendicularly away from said panel board, said clip including two integral downwardly extending legs which engage and hold the legs of said strip member, one end of said clip having two fingers extending outwardly away from said strip and through holes in said panel board for holding the clip thereto and for holding said jar strip member away from the panel board a given distance, said distance being such that the edge of a jar adapted to be held by said strip engages said panel board.

13. A clip for connection to a perforated panel board comprising a flat planar member having a main portion adapted to extend away from a panel board, one end of said clip having two spaced apart panel board engaging fingers integral with said main portion and adapted to be inserted in spaced apart holes in a panel board, said clip at said one end having a slot between said panel engaging fingers to facilitate permanent deformation of said clip whereby to spread apart said two fingers after they have been inserted in said panel board, means for spreading said fingers apart after they have been inserted in said holes, at least one of said fingers having hook means integral therewith adapted to hook behind a panel board.

References Cited by the Examiner

UNITED STATES PATENTS

1,803,016	4/1931	Harsted	248—225
1,866,331	7/1932	Toelle	248—262
1,912,241	5/1933	Abronski	248—71
2,327,379	8/1943	Thomas	211—49
2,620,691	12/1952	Gould	81—31.1
2,642,249	6/1953	Samuels	248—224
2,668,995	2/1954	Morrow	24—81
2,685,721	8/1954	Eves	24—73
2,754,009	7/1956	Kennedy	211—74
2,954,876	10/1960	Mathews	211—49
3,027,036	3/1962	Budreck	215—100
3,080,140	3/1963	Gohs	248—74

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