HINGED OR SWINGING OVERHEAD GARAGE DOOR SHELF BRACKETS

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ABSTRACT

Hinged or swinging overhead garage door shelf brackets. A shelf bracket consisting of a cantilever beam extending horizontally when attached to a closed overhead garage door. Near the cantilever extended end is a hole therein. An additional lower bracket extends downward vertically with a hole near the upper end thereof and a small ledge extending horizontally at the lower end thereof. The small ledge extends far enough to support and secure a shelf thereto. A rivet pin inserted in the hole of the extended end of the cantilever beam and through the hole in the upper end of the lower bracket thereby forming one united shelf bracket. As the overhead garage door is opened and the cantilever changes from a horizontal position to a vertical position, the lower bracket of the united shelf bracket swings and remains vertical, therefore an attached shelf remains level.
HINGED OR SWINGING OVERHEAD GARAGE DOOR SHELF BRACKETS

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to a shelf bracket assembly attached to each end of a shelf and allowing it to swing keeping the attached shelf level, for the purpose of attaching it to an overhead garage door, allowing the garage door area to be useful for storing and organizing things normally stored in the garage.

[0003] 2. Brief Description of the Prior Art

[0004] Additional shelves are needed in many areas of the household and business areas. Prior to this invention, the garage door area was a dead space as far as storage or shelf organizers. These shelves can easily be installed in a variety of sizes and places in the home or office.

BRIEF SUMMARY OF THE INVENTION

[0005] In view of the above, the objective of the present invention is to provide a space for storage and/or display that previously was not available. The present invention can be installed easily with a drill, small wrench and a screwdriver. The present invention can be mounted on an overhead garage door, a basement ceiling or floor joist for easy access to things like collectibles that are otherwise stored in boxes. The present invention can be mounted in places such as under a stairway, on an angled wall of a roof dormer, on an attic roof rafter, on cathedral ceilings and many areas that are normally hard to fit a shelf. Wherever one chooses to install the present invention, it will seek to be level.

[0006] Features of the present invention which accomplish the above objective include a two part bracket with an upper part and a lower part connected with a rivet allowing the lower part to swing. The lower part of the present invention being attached to each end of a shelf and the upper part being attached to any single-angled wall or ceiling will allow the shelf to remain level. The shelf has front and rear raised edges for safety and shelf strength.

[0007] The present invention summarized above comprises the constructions hereafter described, the scope of the present invention being indicated by the subjoined claims.

REFERENCES

[0008] FIG. 1 is a perspective view of a Hinged or Swinging Overhead Garage Door Shelf Bracket.

[0009] FIG. 2 is a cross-sectional side view of the upper portion of the shelf bracket.

[0010] FIG. 3 is a cross-sectional side view of the lower portion of the shelf bracket.

[0011] FIG. 4 is a front view drawing of the lower portion of the shelf bracket.

[0012] FIG. 5 is a top view drawing of the upper or cantilever portion of the shelf bracket.

[0013] FIG. 6 is a top view drawing of the lower portion of the shelf bracket.

[0014] FIG. 7 is a front view drawing of the upper or cantilever portion of the shelf bracket.

[0015] FIG. 8 is a perspective view of a Hinged or Swinging Overhead Garage Door Shelf Bracket attached to a shelf as it would hang when attached to a closed overhead garage door or any vertical object.

[0016] FIG. 9 is a perspective view of a Hinged or Swinging Overhead Garage Door Shelf Bracket attached to a shelf as it would hang when attached to an open overhead garage door or any raised horizontal object.

BRIEF DESCRIPTION OF THE INVENTION DRAWINGS

[0017] This invention can be made of the following materials: aluminum, steel, iron, plastic, acrylic or wood.

[0018] The process by which the invention can be made is: aluminum stamping or casting, steel stamping, cast-iron, plastic molding, forming of acrylic, or cut from wood.

[0019] In FIG. 1 is a Hinged or Swinging Overhead Garage Door Shelf Bracket 1, including a mounting flange 2, within the mounting flange are two tapered holes 3, extending from the mounting flange is the cantilever portion of the upper designed bracket 4, within the upper and lower designed brackets are apertures for design and weight reduction 5, a rivet of appropriate size that connects the upper cantilever section to the lower section of the bracket 6, the lower portion of the bracket 7, a shelf supporting ledge protruding vertically from the lower end of the lower portion of the bracket 8, extended portion of the shelf supporting ledge 9, for the purpose of securing a shelf with fasteners are two holes 10.

[0020] In FIG. 2 is the upper portion of the Hinged or Swinging Overhead Garage Door Shelf Bracket 11, including a mounting flange 2, within the mounting flange are two tapered holes 3, extending from the mounting flange is the cantilever portion of the upper designed bracket 4, within the upper designed bracket is an aperture for design and weight reduction 5, a hole 6, to receive a rivet that connects the upper cantilever section 4 to the lower section of the bracket FIG. 3.

[0021] In FIG. 3 is the lower portion of the Hinged or Swinging Overhead Garage Door Shelf Bracket 12, within the lower designed bracket is an aperture for design and weight reduction 5, a hole 6, to receive a rivet that connects the lower section 7 to the upper cantilever section of the bracket FIG. 2, a shelf supporting ledge protruding vertically from the lower end of the lower portion of the bracket 8, extended portion of the shelf supporting ledge 9, for the purpose of securing a shelf with fasteners are two holes 10.
[0022] In FIG. 4 is the front view of the lower portion of the Hinged or Swinging Overhead Garage Door Shelf Bracket 12.

[0023] In FIG. 5 is the top view of the upper or cantilever portion of the Hinged or Swinging Overhead Garage Door Shelf Bracket 11.

[0024] In FIG. 6 is the top view of the lower portion of the Hinged or Swinging Overhead Garage Door Shelf Bracket 12.

[0025] In FIG. 7 is the front view of the upper or cantilever portion of the Hinged or Swinging Overhead Garage Door Shelf Bracket 11.

[0026] In FIG. 8 is a perspective view of two Hinged or Swinging Overhead Garage Door Shelf Brackets 1, attached to a shelf 13, as it would hang when attached to a closed overhead garage door or any vertical object, a ledge or ridge of a desired height 14, attached to the back side of the shelf 13, a ledge or ridge of a desired height 15, attached to the front side of the shelf 13.

[0027] In FIG. 9 is a perspective view of two Hinged or Swinging Overhead Garage Door Shelf Brackets 1, attached to a shelf 13, as it would hang when attached to an open overhead garage door or any raised horizontal object, for shelf strength a ledge or ridge of a desired height 14, is attached to the back side of the shelf 13, a ledge or ridge of a desired height 15, is attached to the front side of the shelf 13.

What is claimed is:

1. A shelf bracket consisting of a cantilever beam extending horizontally thereby attached to a closed overhead garage door. Near the cantilever extended end is a hole therein. An additional lower bracket extends downward vertically with a hole near the upper end thereof and a small ledge extending horizontally at the lower end thereof. The small ledge extends far enough to support and secure a shelf thereto. A rivet pin inserted in the hole of the extended end of the cantilever beam and through the hole in the upper end of the lower bracket thereby forming one Hinged or Swinging Overhead Garage Door Shelf Bracket thereafter referred to as a united shelf bracket. As the cantilever beam is moved from a horizontal position to a vertical position, the lower bracket of the united shelf bracket swings and remains vertical, thereby the attached shelf remains level.

2. A united shelf bracket as in claim 1 whereas the upper bracket is designed to be manufactured with the lower bracket and joined together with a rivet thereby forming one overhead garage door shelf bracket.

3. A united shelf bracket as in claim 1 whereas the lower bracket is designed with a ledge to support and secure a shelf and to be manufactured with the upper bracket and joined together with a rivet thereby forming one overhead garage door shelf bracket.

4. A united shelf bracket as in claim 1 whereas the upper bracket and lower bracket designed to be manufactured and joined together with a rivet thereby forming one united shelf bracket, when one bracket is positioned at each shelf end and fastened through the holes in the mounting flange to any single angled surface wherein the function or result is for the shelf to seek to be level and rest in the direction of the gravitational pull.

5. A united shelf bracket as in claim 4 wherein the manufactured bracket can be mounted to any raised single angled flat surface by means of fasteners through the holes in the mounting flange to a surface such as: overhead garage doors, vaulted ceilings, cathedral ceilings, under a stairway, porch ceilings, basement ceilings, roof rafters, floor joist, window openings.