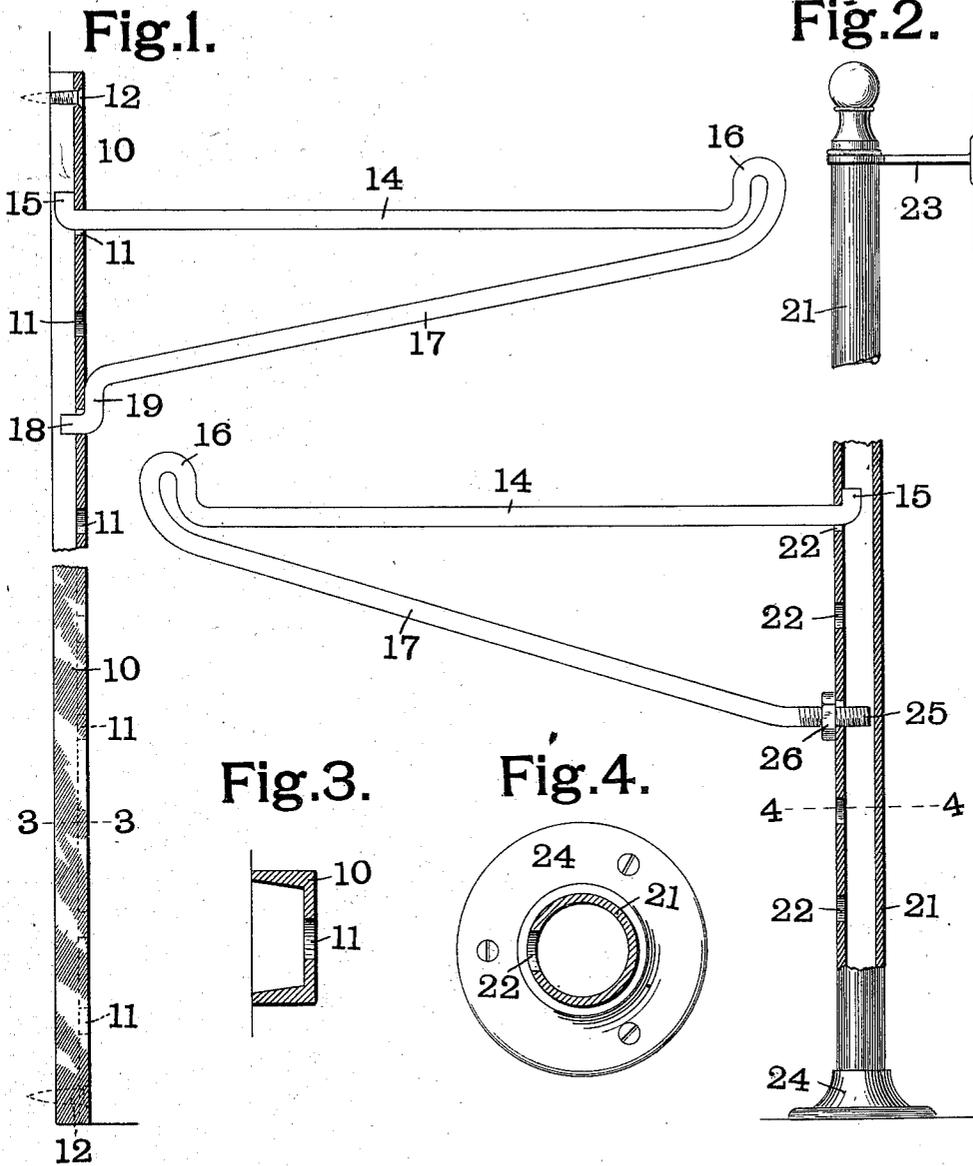


M. A. HEIMANN.
ADJUSTABLE SHELF BRACKET.
APPLICATION FILED APR. 1, 1902.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

MORRIS A. HEIMANN, OF ST. LOUIS, MISSOURI.

ADJUSTABLE SHELF-BRACKET.

SPECIFICATION forming part of Letters Patent No. 733,037, dated July 7, 1903.

Application filed April 1, 1902. Serial No. 100,896. (No model.)

To all whom it may concern:

Be it known that I, MORRIS A. HEIMANN, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented a certain new and useful Adjustable Shelf-Bracket, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to provide a shelf-bracket which while simple of construction can be readily and instantly adjusted in height without the use of tools and which will be permanently held in position by the weight of the shelf resting upon it.

My invention consists, in part, in the combination, with a supporting member provided with a plurality of openings, of a bracket provided with two limbs adapted to enter said opening, one of said limbs being provided with a retaining projection and means for limiting the movement of the other limb.

My invention also consists in certain other novel features and details of construction, all of which will be described in the following specification and pointed out in the claims affixed hereto.

In the accompanying drawings, which illustrate two forms of bracket made in accordance with my invention, Figure 1 is a side view partly in elevation and partly in section. Fig. 2 is a view similar to Fig. 1, but showing slight modifications. Fig. 3 is an enlarged section on the line 3 3 of Fig. 1, and Fig. 4 is an enlarged section on the line 4 4 of Fig. 2.

Like marks of reference refer to similar parts in the several views of the drawings.

10 represents a supporting member or upright, which is preferably formed from a channel-bar. In this upright 10 are formed a number of openings 11. The upright 10 is secured, by means of screws 12, to any suitable support, such as the wall of a room or the sides or ends of a show-case or show-window. The bracket which is carried by the upright 10, as will be hereinafter described, is formed of a single piece of resilient material, such as steel rod. The upper limb 14 of the bracket is horizontal when the bracket

is in position and is adapted to support a shelf. The limb 14 is provided at its inner end with an upturned part 15, which forms a retaining projection. At the outer end of the upper limb 14 is formed a loop 16, the continuation of which forms the lower limb 17 of the bracket. Adjacent to the inner end 18 of the lower limb 17 is an offset 19, which forms an abutment for limiting the movement of said end 18 when entering one of the openings 11. To secure the bracket to the upright, the bracket is placed in vertical position, so that the upturned end 15 can enter one of the openings 11. The bracket is then brought down to a horizontal position and the two limbs 14 and 17 pressed toward each other until the end 18 of the lower limb 17 enters one of the openings 11 and the abutment 19 comes in contact with the face of the channel-bar 10. The tendency of the limbs 14 and 17 to separate forces the upper limb 14 against the upper edge of the opening in which it is placed and also forces the lower side of the end 18 of the lower limb against the lower edge of the opening in which it is placed. This pressure holds the bracket from being jarred from position when there is no weight resting upon it. Whenever weight is applied to the bracket, the tendency is to pull the upper limb 14 outward and to force the lower limb 17 inward. This binds the projection 15 and the abutment 19 firmly against the inner and outer faces of the channel-bar 10, thus firmly holding the bracket in position.

In Figs. 2 and 4 I have shown a slight modification. In place of the channel-bar 10 I have shown a tube 21, in which are formed suitable openings 22, corresponding to the openings 11 in the channel-bar 10. The tube 21 is secured to the wall at its upper end by means of a suitable arm 23 and is secured to the floor at its lower end by means of a base 24. The bracket shown in connection with this modification is the same as the bracket shown in Fig. 1, except that in place of the abutment formed by the offset 19 I use a screw-threaded end 25, on which is placed a nut 26, which forms an adjustable abutment to limit the movement of the lower limb 17. The object of this movable abutment 26 is to provide means for leveling the upper limb

14 in case it should not be exactly horizontal. It will be readily seen that by moving this abutment 26 toward or away from the end of the lower limb the upper limb 14 can be brought to a perfect level.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination with a supporting member provided with a plurality of openings, of a bracket provided with two limbs capable of spring movement toward and away from each other for clamping the bracket in position, one of said limbs being adapted to enter one of the openings in said supporting member when the bracket is in a vertical position and being provided with an upwardly-extending projection acting as a retaining member when the bracket is in a horizontal position, the other limb being provided with a rearwardly-projecting end adapted to enter another of the openings in said supporting member to prevent lateral movement of the bracket, and an abutment adjacent to said end for limiting the movement of said end in said opening.

2. The combination with a supporting mem-

ber provided with a plurality of openings, of a bracket provided with two limbs formed of a single piece of resilient rod or wire, whereby said limbs are capable of spring movement toward and away from each other for clamping the bracket in position, one of said limbs being adapted to enter one of said openings when the bracket is in a vertical position and being provided with an upturned end acting as a retaining member when said bracket is in a horizontal position, the other of said limbs being provided with a rearwardly-projecting end adapted to enter another of the openings in said supporting member to prevent lateral movement of the bracket, and a bend formed in said latter limb adjacent to said end forming an abutment for limiting the movement of said end into said opening.

In testimony whereof I have hereunto set my hand and affixed my seal in the presence of the two subscribing witnesses.

MORRIS A. HEIMANN. [L. S.]

Witnesses:

W. A. ALEXANDER,
L. B. BEACH.