

Oct. 27, 1931.

S. MADSEN

1,829,009

SHELF REST

Filed Nov. 19, 1929

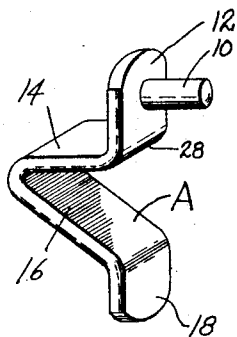


Fig. 1.

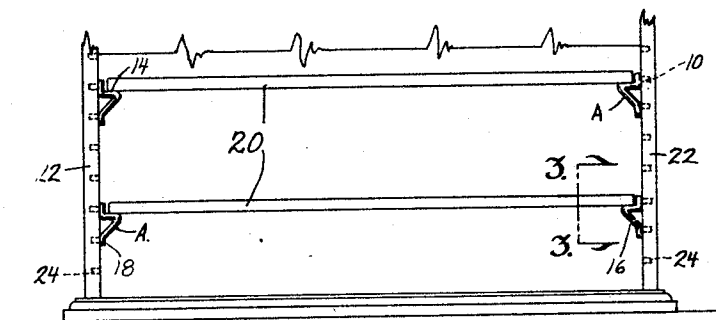


Fig. 2.

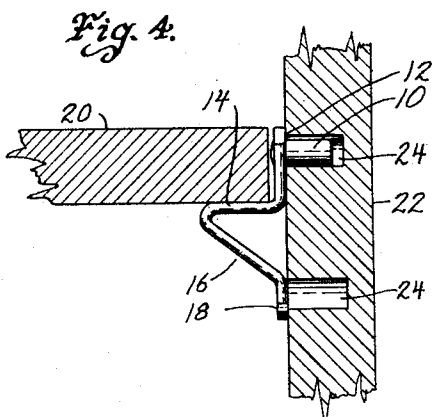


Fig. 4.

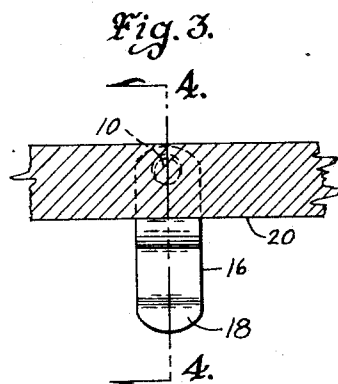


Fig. 3.

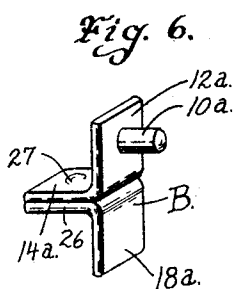


Fig. 6.

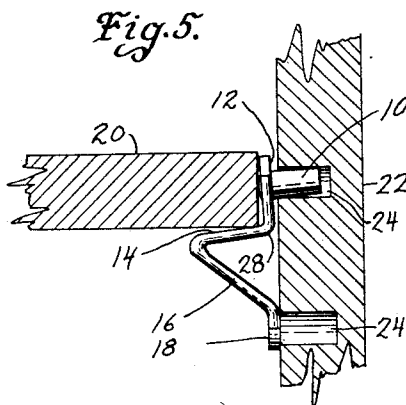


Fig. 5.

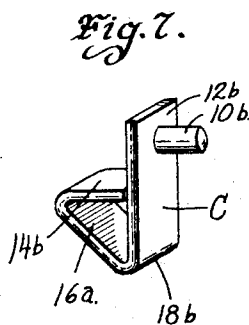


Fig. 7.

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SHELF REST

Application filed November 19, 1929. Serial No. 408,295.

The object of my invention is to provide a shelf rest which is simple, durable and comparatively inexpensive to manufacture.

More particularly it is my object to provide a shelf rest consisting of a pin adapted to enter an opening bored in a shelf end member, a shelf supporting member consisting of a vertical portion secured to one end of the pin, extending downwardly therefrom and terminating in a horizontal extending shelf supporting portion with a downward extension adapted to engage the shelf end member at a point substantially spaced below the lower edge of a shelf supported by the shelf rest.

A further object is to provide a shelf rest in the form of an initially flat bar of angle shape with a pin secured adjacent one end thereof and a downwardly extending part from the opposite end of the bar arranged to be aligned with the portion of the bar to which the pin is secured.

Still another object is to provide a modified construction of the shelf rest involving the same principles whereby the shelf end member is engaged by a portion of the shelf rest at a point substantially spaced below the shelf.

With these and other objects in view my invention consists in the construction, arrangement and combination of the various parts of my device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claim, and illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of the preferred form of a shelf rest.

Figure 2 is a front elevation illustrating shelf and members and shelves, the shelves being supported relative to the end member by shelf rests of my improved design.

Figure 3 is an enlarged sectional view on the line 3—3 of Figure 2.

Figure 4 is a sectional view on the line 4—4 of Figure 3.

Figure 5 is a similar sectional view of the shelf rest in a slightly different position; and

Figures 6 and 7 are perspective views of modified forms of shelf rests.

On the accompanying drawings I have used the reference character A to indicate generally the shelf rest. It consists of a pin 10 to which one end of an initially flat bar is secured. The flat bar is bent to form a vertical portion 12, a horizontal shelf rest 14, a diagonally extending portion 16 and a shelf end member engaging portion 18.

The shelf rest A is adapted to be associated with a shelf 20 and shelf end members 22 in the following described manner. Spaced openings 24 are formed in the end members 22 for selectively receiving the pin 10 of the shelf rest member A, whereby the shelf 20 may be vertically adjusted when the pin 10 is inserted and the portion 18 of the shelf rest A engages the surface of the shelf end member 22 in which the openings 24 are bored. The shelf members 20, which are slightly less in length than the distance between the shelf end members 22, are positioned as shown in Figures 2 and 4 resting on the supporting portions 14 of the shelf rests A.

In Figure 6, I have illustrated a modified form of construction in which B refers to the shelf rest. The pin 10a is secured to one leg 12a of an angle bracket having a second leg 14a. The leg 14a is adapted to engage the under surface of the shelf 20. A second angle bracket has a portion 18a to engage the shelf end member 22 and a second portion 26 adapted to be riveted or spot welded to the portion 14a of the first angle as indicated at 27.

In Figure 7, I have illustrated another modified form of shelf rest referred to as C. The bar 10b of the rest C is secured to the portion 12b of an initially flat bar which extends downwardly from the pin, is bent diagonally as indicated at 16a and horizontally as indicated at 14b. The portion 14b engages the bottom of the shelf 20 while the lower end 18b of the portion 12b engages the shelf end member 22.

Advantages of my improved shelf rest

Shelf rests have heretofore been made consisting of the pin 10 and the portions 12 and 14 only illustrated in Figure 1. These, how-

ever, have a tendency to rotate (counter-clockwise as illustrated in Figure 5 of the drawings) with a point corresponding to the bend indicated at 28 acting as a pivot. Consequently when the shelf 20 is heavily loaded there is a tendency to crush the wood at the bottom of the opening 24 and spread the shelf end members 22 which eventually allows the shelf 20 to fall.

- 10 As illustrated in Figure 5, the portion 18 of my shelf rest engages the shelf end member 22 to act as a pivot and any tendency to rotate the shelf rest counter-clockwise will merely move the portion 12 to engage the
 15 end of the shelf 20 as illustrated. There can then be no further rotation of the shelf rest and consequently the wood at the bottom of the opening 24 will not be broken down, as when a heavy load is imposed on an ordinary
 20 type of rest which causes excessive rotation.

The load on the shelf is transmitted to the pin in a more nearly directly downward line than where the pin can rotate as in the usual construction. Thus, the downward stress is
 25 spread over practically the entire length of the pin instead of mainly at the outer end of the shelf end member 22. The tendency to pull the pin out of the hole against the shelves is considerably reduced in my type of construction and consequently the weight of the
 30 shelf does not impose a leverage on the shelf rest to spread the shelf end members 22.

Hence it is obvious that the portions 18, 18a and 18b of the shelf rests A, B and C are
 35 very important in providing a shelf rest of improved design. By actual experiment, I have found that the load on the shelf 20 can be doubled with my type of rest over the old type with these downwardly extending portions which are located substantially below
 40 the shelf.

Some changes may be made in the construction and arrangement of the parts of my device without departing from the real spirit
 45 and purpose of my invention, and it is my intention to cover by my claim, any modified forms of structure or use of mechanical equivalents, which may be reasonably included within its scope.

50 I claim as my invention:

For use with a shelf and a solid shelf end member having an opening therein, a shelf rest comprising a round pin adapted to be received snugly in said opening, a shelf supporting member of flattened bar cross section secured to one end of said pin and having a
 55 first portion extending downwardly therefrom to lie along said shelf end member on one side and engage the end of said shelf on the other side to hold said pin in place, said bar being bent to form a second portion extending horizontally from the lower end of the first portion and extending beneath said shelf and a third portion extending downwardly from the outer end of the second por-

tion in an angular direction toward and adapted to engage the surface of said shelf end member at a point spaced below said first portion.

Des Moines, Iowa, October 24, 1929.

SERN MADSEN.

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