Aug. 5, 1941. F. M. JOHNSON 2,251,737

SHELF

Filed Feb. 2, 1940 2 Sheets-Sheet 1

Fig. 1

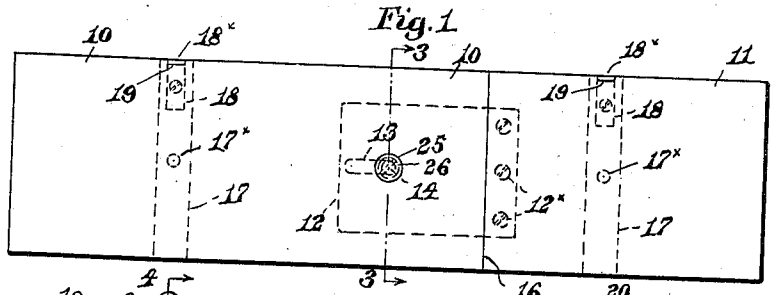


Fig. 2.

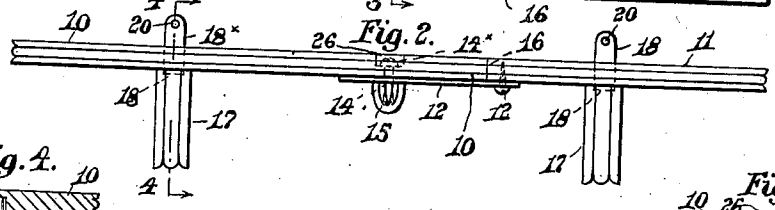


Fig. 4.

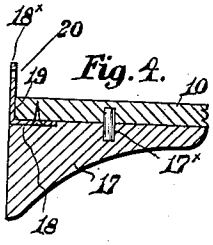


Fig. 3.

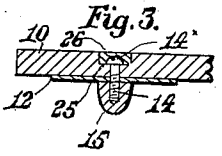


Fig. 5.

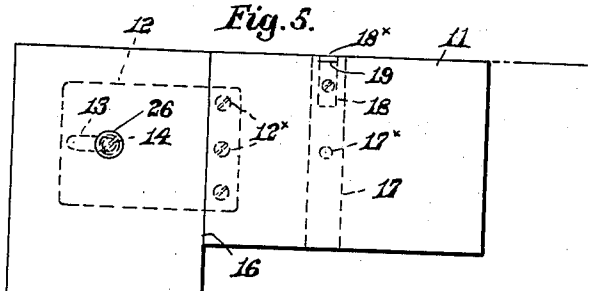
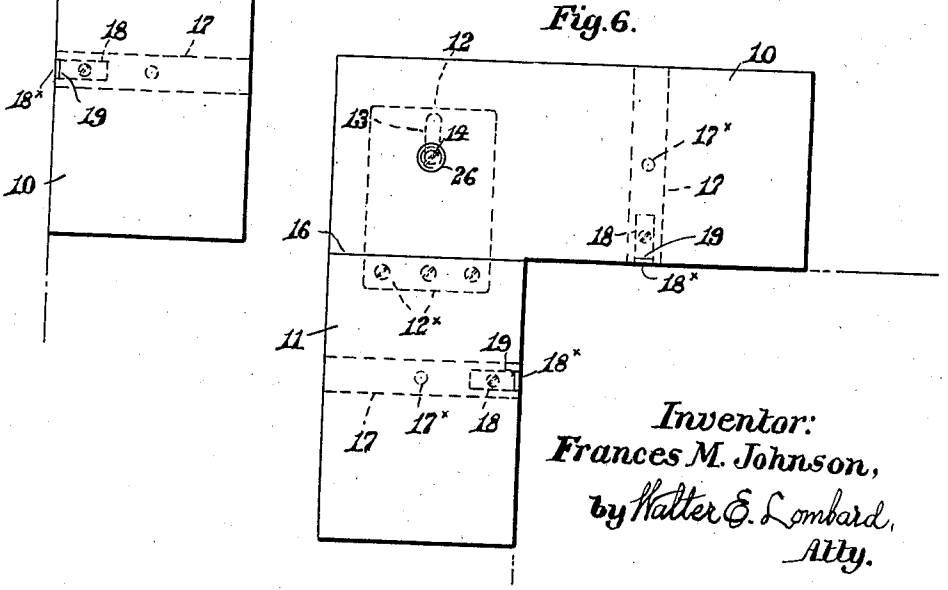


Fig. 6.



Inventor:
Frances M. Johnson,
by Walter E. Lombard,
Atty.

Aug. 5, 1941. F. M. JOHNSON 2,251,737

SHELF

Filed Feb. 2, 1940 2 Sheets-Sheet 2

Fig. 7.

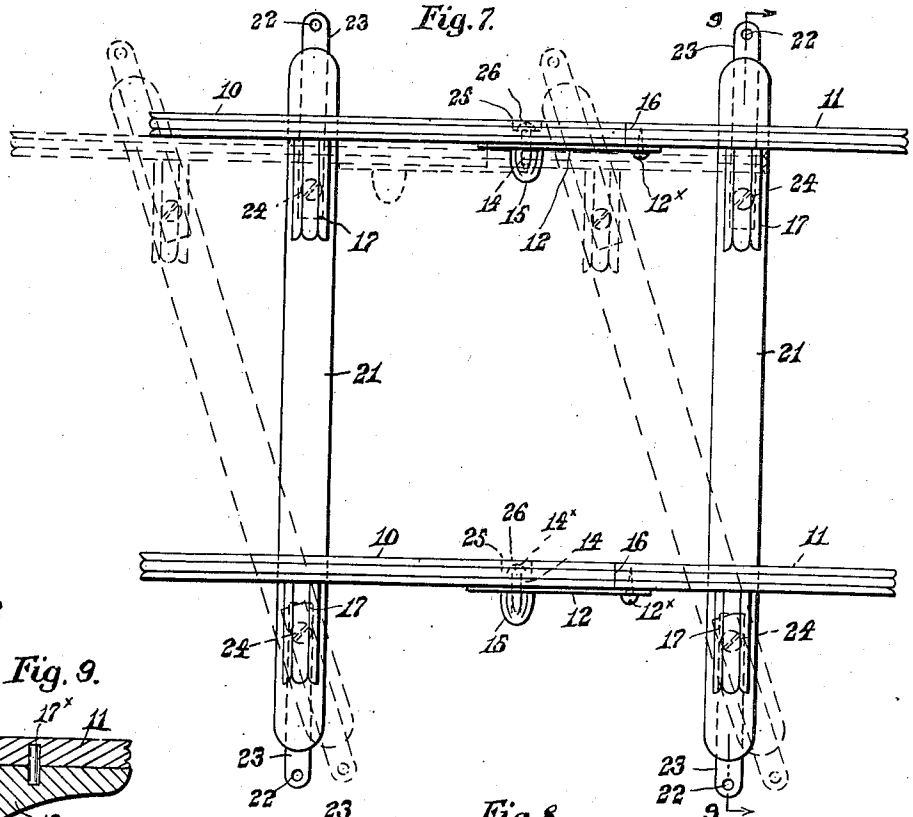


Fig. 9.

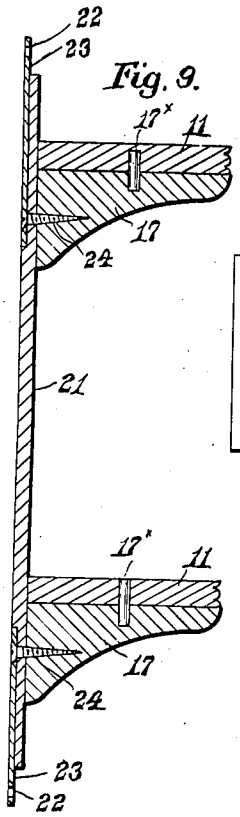
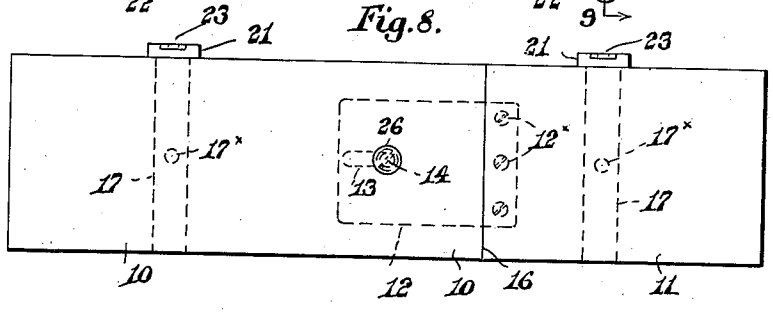


Fig. 8.



Inventor:
Frances M. Johnson,
by Walter E. Lombard,
Atty.

Patented Aug. 5, 1941 2,251,737

UNITED STATES PATENT OFFICE

2,251,737

SHELF

Frances M. Johnson, Boston, Mass., assignor of one-half to John A. Clark, Quincy, Mass.

Application February 2, 1940, Serial No. 316,947

10 Claims. (Cl. 211—90)

This invention relates to adjustable shelves and has for its object the provision of a shelf adapted to be secured to the interior walls of a building to support various small articles.

One object of the invention is to provide such a shelf made in two parts, one part being movable horizontally about the other part and adapted to be clamped thereto in adjusted position with said movable part either in alinement with the other part or perpendicular to either edge thereof.

Another object of the invention is to provide means for supporting a plurality of these adjustable shelves spaced apart one above the other and securing them to the wall of a building.

These and other objects as will hereinafter appear are attained by the instrumentalities shown in the accompanying drawings.

For the purpose of illustrating the invention, one preferred form thereof is illustrated in the drawings, this form having been found to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized, and the invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described except as required by the scope of the appended claims.

Of the drawings:

Figure 1 represents a plan of a two part adjustable shelf embodying the features of the present invention.

Figure 2 represents a front elevation of the same.

Figure 3 represents a transverse section on line 3, 3 on Fig. 1.

Figure 4 represents a transverse section on line 4,4 on Fig. 2.

Figure 5 represents a plan of said shelf with the movable member thereof disposed at right angles to one side of the other member.

Figure 6 represents a plan of the shelf with the movable member disposed at right angles to the opposite side of the other member.

Figure 7 represents an elevation of two of said shelves with the supporting brackets thereof pivotally secured to normally vertical bars adapted to be secured to an interior wall of a building.

Figure 8 represents a plan of the same, and

Figure 9 represents a vertical transverse section on line 9, 9 on Fig. 7.

Similar characters indicate like parts throughout the several figures of the drawings.

In the drawings, 10, 11 are two flat shelf members of equal thickness and width and with their upper and lower faces parallel, these shelf members preferably being rectangular.

The member 11 is shorter than the member 10 and has secured to its under face by screws 12x a metal plate 12 which at its outer end has an elongated slot 13 adapted to receive a vertically positioned pivot member 14 extending downwardly from the member 10 and through the slot 13 of plate 12, said pivot member 14 being disposed equidistant from one end and from opposite side edges of said member 10.

The slot 13 has sufficient length to permit the movable member 11 being moved outwardly from an end of the member 10 a sufficient distance to permit the passage of said member 11 about a corner of the member 10 when said member 11 is moved horizontally about the pivot member 14.

By means of this adjustment the member 11 may be moved out of alinement with the member 10 as shown in Fig. 1, into a horiozntal position perpendicular to one side edge thereof, as shown in Figs. 5 and 6.

The pivot member 14 has threaded to its under side a clamp nut 15 and when the movable member 11 is adjusted into any desired position perpendicular to or in alinement with the member 10, this clamp nut is turned to rigidly clamp the two members 10, 11 together with the edge 16 of the member 11 abutting either an end of the member 10 or one side edge thereof.

Each member has permanently secured thereto a bracket 17, as by means of dowel pins 17x which may be glued in place and each bracket has embedded in the upper face thereof an angle bar 18 the upwardly extending portion 18x thereof being disposed in a recess 19 in the rear edge of each member 10 or 11, with said upper end 18x extending above the upper face of the members 10, 11.

Each angle bar 18 has at its upper end an opening 20 therein to receive a nail or other device by which the shelf may be attached to the wall of a building.

When the two members 10, 11 are in alinement, as shown in Fig. 1, the shelf may be secured to a straight vertical wall and when the movable member 11 is at right angles to one side edge of the member 10, as shown in Fig. 5, the shelf may be secured in a recessed corner of a wall.

When the member 11 is secured to the opposite side edge of the member 10, as shown in Fig. 6 it is in position to be secured to an outwardly extending corner of a wall.

When it is desired to mount a plurality of these

shelves 10, 11 on a wall either with the members 10, 11 in alinement or perpendicular to each other, the brackets 17 of said shelves spaced apart vertically may be secured to two normally vertical bars 21 with one shelf 10, 11 above another.

The upper ends of these bars 21 extend above the upper shelf members 10, 11 and are provided with openings 22 to receive supporting nails or pins whereby the plurality of shelf members 10, 11 may be secured to the wall of a building.

It is obvious that the several shelves may be secured to a straight wall, or to walls perpendicular to each other.

When a plurality of shelves 10, 11 are used in or around corner walls, it is obvious that each clamping nut 15 must be loosened and all of the movable members 11 simultaneously moved about the ends of the other members 10 and then again clamped to said members 10 in their adjusted positions perpendicular thereto.

It will be noted that when the members 10, 11 are disposed perpendicular to each other in position to be secured to walls in a corner recess, as shown in Fig. 5, the supports 18 are at the outer edge of the shelf and when the shelf members are in position to be secured to projecting corner walls, the supports 18 are at the inner edge of the shelf as shown in Fig. 6.

Preferably the opposite ends of the bars 21 have secured to their rear faces metal plates 23 extending beyond the ends of the bars 21 and having the nail or pin holes 22 therein.

The brackets 17 of the shelf members 10, 11 are pivotally connected to the bars 21 by the screws 24, so that the bars 21 may be moved out of perpendicular into inclined positions as indicated in dotted lines in Fig. 7, with the pair of shelf members 10, 11 in echelon and then secured in this adjusted position by the nails or pins extending through the openings 22 in the plates 23 at the opposite ends of the bars 21.

The head 14x of the pivot member 14 is disposed in a recess 25 in a shelf member 10 and this recess 25 is filled with a wooden block 26 or filled with plastic wood as desired.

The clamping nut 15 is preferably in the form of an acorn with vertical ribs on the outer surface thereof whereby the nut may be freely turned by a person's fingers.

It is believed that the operation and many advantages of the invention will be understood without further description.

Having thus described my invention, I claim:

1. A wall shelf comprising two flat members with rectangular ends, means holding said members in substantially the same flatwise plane, said means embodying a pivotal connection between the end portions of said members with a limited endwise lost motion permitting the end of one member to be cleared around end corners of the other member whereby said members may be adjusted with respect to each other so that one member is in endwise alinement with, or perpendicular to a front or rear edge of the other member at will, and means for locking said members together in any one of the several adjusted abutting positions.

2. A wall shelf as set forth in claim 1, in which a transversely disposed supporting bracket is secured to the under side of each shelf member.

3. A wall shelf as set forth in claim 1, in which a transversely disposed supporting bracket is secured to the under side of each shelf member, and a metal angle bar set into the rear upper face of each bracket and having an upwardly extending portion positioned in a recess in the rear edge of each shelf member, said upwardly extending portion having an opening in the upper end thereof.

4. A wall shelf as set forth in claim 1, in which said pivotal connection includes a vertical pivot member disposed in one shelf member, a metal plate secured to the under face of the other shelf member, said metal plate being provided at its outer end with a longitudinal slot to receive said pivot member, and a clamping nut on the lower end of said pivot member bearing against the under face of said plate.

5. A wall shelf as set forth in claim 1, in which said pivotal connection includes a vertical pivot member disposed in one shelf member and equidistant from one end of said shelf member and from its opposite side edges.

6. A wall shelf as set forth in claim 1, in which said pivotal connection includes a vertical pivot member disposed in one shelf member, a metal plate secured to the under face of the other shelf member, said metal plate being provided at its outer end with a longitudinal slot to receive said vertical pivot member, and a clamping nut on the lower end of said pivot member bearing against the under face of said plate, said slot having a length sufficient to permit the movable shelf member in its movement outwardly and about said pivot member to pass a corner of the other shelf member.

7. A wall shelf as set forth in claim 1, in which both shelf members are rectangular and one shelf member is shorter than the other shelf member.

8. A plurality of wall shelves as set forth in claim 1, in which each shelf member has secured to its under face a supporting bracket, and vertical bars to which the various pairs of brackets are secured spaced apart vertically, the upper end of each bar being provided with an opening to receive a supporting pin.

9. A plurality of wall shelves as set forth in claim 1, in which each shelf member has secured to its under face a supporting bracket, and vertical bars to which the various pairs of brackets are secured spaced apart vertically, the opposite ends of each bar being provided with openings to receive supporting pins.

10. A wall shelf comprising two flat rectangular parts of equal thickness and width, means normally holding said parts in the same plane flatwise thereof, said means embodying a pivotal and extensible connection between end portions of said parts whereby the end of one part may be swung around the other part so as to clear the corners thereof and abut against either the end, or the front, or rear edge of the other part, and means for locking said parts together in abutting relation to each other and in the same plane in any one of said adjusted positions.

FRANCES M. JOHNSON.