March 22, 1938. J. W. MOORE 2,111,918

WALL HANGER FOR RADIATORS

Filed June 10, 1936

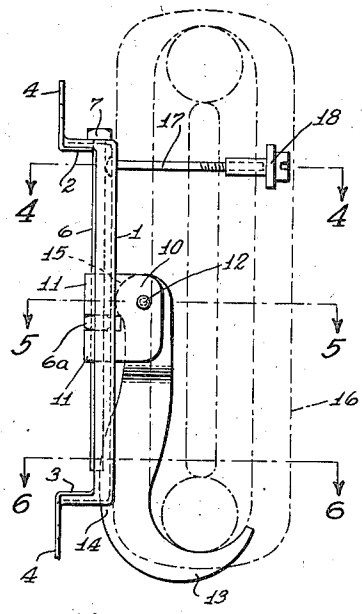

Fig. 1.

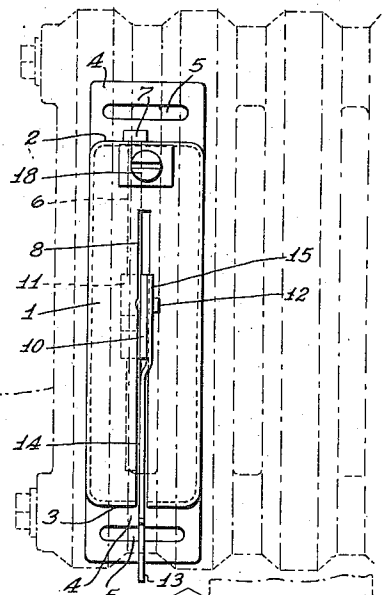

Fig. 2.

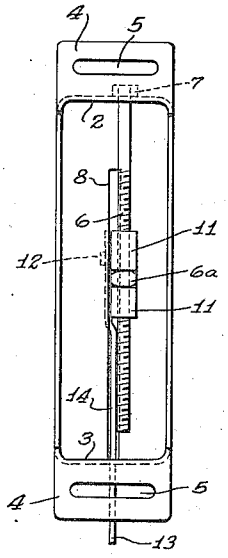

Fig. 3.

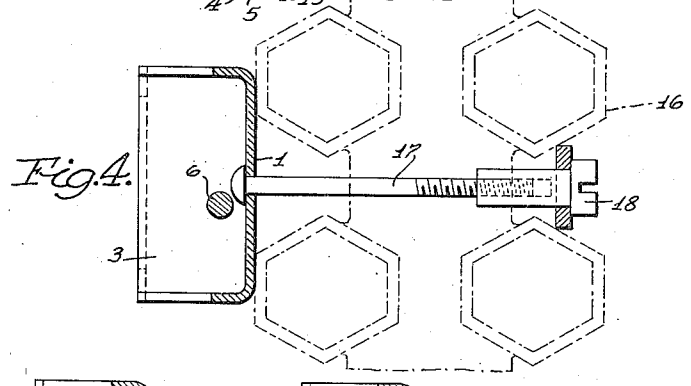

Fig. 4.

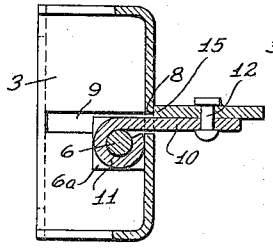

Fig. 5.

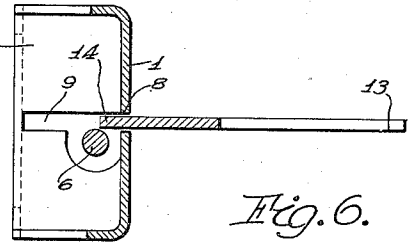

Fig. 6.

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2,111,918

WALL HANGER FOR RADIATORS

John W. Moore, Detroit, Mich.

Application June 10, 1936, Serial No. 84,396

6 Claims. (Cl. 248—232)

This invention relates to radiator hangers of the type adapted to be secured to a wall or like support in a building for the purpose of supporting radiators and such devices with respect to said wall or support.

The primary object of the invention is to provide a hanger, of the character referred to in the preceding paragraph, which is adjustable both vertically and horizontally. Such adjustments are desirable from numerous standpoints, for example, to eliminate the necessity for exact measurements in mounting the hanger by permitting the radiator to be raised or lowered or moved horizontally after placing it on the hanger. Further, such adjustments make it possible to use a standard sized hanger for different sized radiators inasmuch as the vertical adjustments adapt the hanger to radiators of varying height, while the horizontal adjustments adapt the hanger for radiators of varying width such as radiators having a greater or fewer number of columns.

Another object of the present invention is to provide a hanger for supporting a radiator embodying a pivoted hook element supported by an adjustable element on the supporting bracket, the hook element and bracket having co-operating means preventing lateral movement of the hook element while permitting pivotal movement thereof, and the hook element having a portion thereon engaging the bracket to maintain the adjustable parts in operative relationship so that the adjustments may be readily made after the radiator is assembled on the hook.

The above and other objects will become more apparent from the following detailed description wherein reference is had to the accompanying drawing, in which

Figure 1 is a side elevation of the hanger, the radiator outline being indicated by broken lines;

Fig. 2 is a front elevation of the hanger, a fragment of the radiator outline being indicated in broken lines;

Fig. 3 is a rear elevation of the hanger, and

Figs. 4, 5 and 6 are sections taken respectively on the lines 4—4, 5—5, and 6—6 of Fig. 1.

Like characters of reference are employed throughout to designate corresponding parts.

The numeral 1 designates a bracket having upper and lower horizontal walls 2 and 3 with end flanges 4, the end flanges having transverse slots 5 for receiving fastening elements (not shown) for the purpose of securing the bracket to a wall or the like. Supported by the horizontal wall 2 is a suspension member in the form of a screw 6, the screw being supported on the wall 2 by engagement of the head 7 therewith, the head in addition to supporting the screw being adapted for engagement by a turning tool or wrench. The bracket 1 has a vertical slot 8 extending from a point adjacent to the upper horizontal wall downwardly to and communicating with a slot 9 in the lower horizontal wall 3. The slot 8 is comparatively narrow.

Extending through the slot 8 is a plate 10, the plate being bent along its inner edge to form two tubular portions 11 which are off-set from the plane of the plate. The screw 6 extends through the tubular portions 11 and has a square nut 6a received between the two tubular portions 11 so that by rotating the screw while holding the nut against rotation the plate 10 will be elevated or lowered. Pivoted at 12 on the plate 10 is a hook 13 having a rear portion 14 normally projecting into the slot 9. Engagement of the portion 14 with the side walls of the slot 9 and engagement of the plate 10 with the side walls of the slot 8 prevent lateral shifting of the hook 13.

The upper end of the hook 13, that is, the portion adjacent the pivot 12, has a circular contour concentric with the pivot as indicated at 15. This portion 15 slidably engages the surface of the bracket 1, and as more clearly shown in Fig. 5, retains the plate 10 in a position holding the nut 6a in engagement with the inner surface of the bracket 1. Engagement of a flat surface of the nut with the inner surface of the bracket holds the nut against rotation so that after a radiator has been placed on the hook the screw 6 may be rotated to adjust its position vertically without requiring the use of a tool to hold the nut against rotation. It will be noted, upon reference to Figs. 2 and 3 more particularly, that the above referred to portion 15 is formed off-set from the normal plane of the hook so that the lower part thereof is free to swing in the slots 8 and 9.

A radiator 16 is illustrated in broken lines as having the lower portion thereof resting upon the hook 13. The upper portion of the radiator is held against the bracket 1 by a bolt 17 and adjustable head 18, the bolt extending between adjacent columns of the radiator and the head 18 engaging such columns. After the hook 13 has been adjusted to the desired vertical position by operation of the screw 6, as above described, the adjustable head 18 is adjusted into firm engagement with the columns of the radiator.

Although a specific embodiment of the inven-

tion has been illustrated and described it will be understood that various changes may be made within the scope of the appended claims without departing from the spirit of the invention, and such changes are contemplated.

What I claim is:—

1. A device of the character described comprising a bracket formed with a vertical wall and upper and lower walls, an adjustable tie member attached to said vertical wall, said upper and lower walls having means for attachment to a support and being adapted to hold said vertical wall spaced from said support, said vertical wall having a vertically extending slot, a slot in said lower horizontal wall communicating with the first named slot, a screwthreaded suspension member mounted in said upper horizontal wall and extending adjacent said vertical slot, a plate extending through said first named slot, a bearing on said plate slidably received on said suspension member, a nut on said suspension member engaging said bearing on said plate, and a hook pivotally mounted on said plate, said hook having a portion slidably engaging the outer surface of said bracket and maintaining said plate and bearing in a position holding the nut against the inner surface of said bracket and thereby preventing rotation thereof.

2. A device of the character described comprising a bracket formed with a vertical wall and upper and lower walls, an adjustable tie member attached to said vertical wall, said upper and lower walls having means for attachment to a support and being adapted to hold said vertical wall spaced from said support, said vertical wall having a vertically extending slot, a slot in said lower horizontal wall communicating with the first named slot, a screwthreaded suspension member mounted in said upper horizontal wall and extending adjacent said vertical slot, a plate extending through said first named slot, a bearing on said plate slidably received on said suspension member, a nut on said suspension member engaging said bearing on said plate, and a hook pivotally mounted on said plate, said hook having a portion slidably engaging the outer surface of said bracket adjacent said vertical slot and maintaining said plate and bearing in a position holding the nut against the inner surface of said bracket and thereby preventing rotation thereof, said hook having a portion off-set from the plane of the portion thereof which engages the outer surface of said bracket and adapted to swing into said slots in said walls.

3. A device of the character described comprising a bracket formed with a vertical wall and upper and lower walls, an adjustable tie member attached to said vertical wall, said upper and lower walls having means for attachment to a support and adapted to hold said vertical wall spaced from said support, said vertical wall having a vertically extending slot, a slot in said lower horizontal wall communicating with the first named slot, a screwthreaded suspension member mounted in said upper horizontal wall and extending adjacent said vertical slot, a plate extending through said first named slot, a bearing on said plate slidably received on said suspension member, a nut on said suspension member engaging said bearing on said plate, a hook pivotally mounted on said plate, said hook having a portion slidably engaging the outer surface of and maintaining said plate and bearing in a position holding the nut against the inner surface of said bracket and thereby preventing rotation thereof, said hook having a portion off-set from the plane of the portion thereof which engages the outer surface of said bracket and adapted to swing into said slots in said walls, and said suspension member being disposed to one side of said vertical slot whereby the portion of said hook which swings in said slots may swing past the same.

4. A device of the character described comprising a bracket formed with a vertical wall and upper and lower horizontal walls, an adjustable tie member attached to said vertical wall, the vertical wall having a vertical slot therein and the lower horizontal wall having a slot communicating with the first named slot, a screw rotatably supported by said upper horizontal wall and disposed to one side of said vertical slot, a plate extending through said vertical slot and having tubular portions thereon loosely sleeved on said screw, a nut on said screw engaging said tubular portions, and a hook pivotally attached to said plate outwardly of said vertical wall and having a portion adapted to swing in said slots and alongside of said screw.

5. A device of the character described comprising a bracket formed with a vertical wall and upper and lower horizontal walls, an adjustable tie member attached to said vertical wall, the vertical wall having a vertical slot therein, the lower horizontal wall having a slot therein communicating with the first named slot, a screw rotatably supported by said upper horizontal wall and disposed to one side of said vertical slot, a plate extending through said vertical slot and having tubular portions thereon loosely sleeved on said screw, a nut on said screw engaging said tubular portions, and a hook pivotally attached to said plate outwardly of said vertical wall and having a portion adapted to swing in said slots and alongside of said screw, said hook having a portion off-set from said first named portion slidably engaging the outer surface of said vertical wall and holding said plate and screw in a position with said nut engaging the inner surface of the vertical wall and thereby preventing rotation of said nut.

6. A device of the character described comprising a bracket formed with a vertical wall and upper and lower horizontal walls, an adjustable tie member attached to said vertical wall, the vertical wall having a vertical slot therein and the lower horizontal wall having a slot communicating with the first named slot, a screw rotatably supported by said upper horizontal wall and disposed to one side of said vertical slot, a plate extending through said vertical slot and having tubular portions thereon loosely sleeved on said screw, a nut on said screw engaging said tubular portions, and a hook pivotally attached to said plate outwardly of said vertical wall, said hook having a portion adjacent said plate slidably engaging the outer surface of said vertical wall, and a second portion off-set from the plane of the first portion and normally disposed in said slots whereby the side walls of the slots prevent lateral swinging of the depending portion of the hook.

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