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C. L. LYON

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RADIATOR SUPPORTING HANGER

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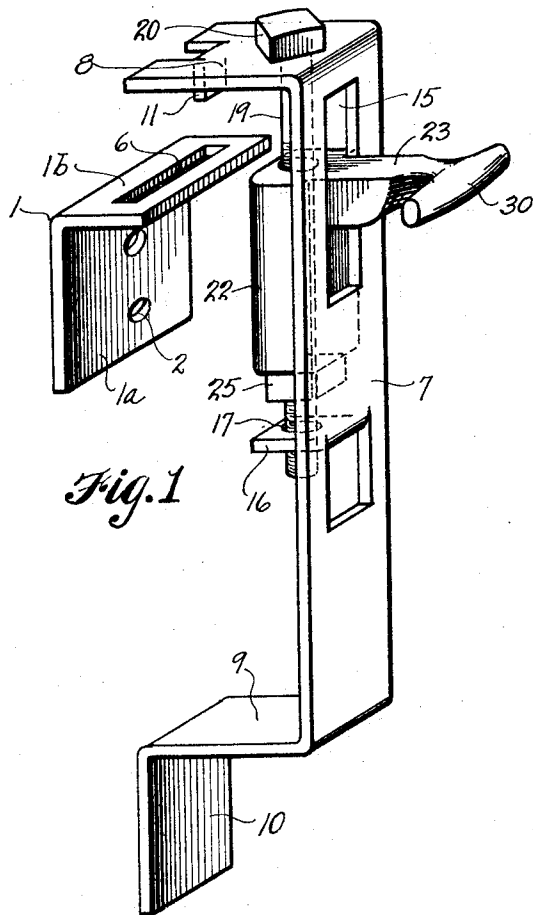


Fig. 1

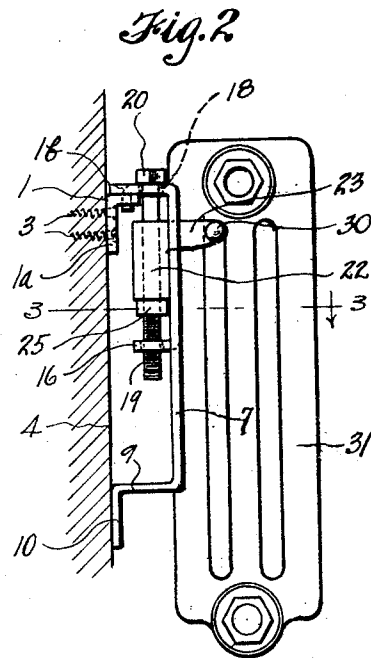


Fig. 2

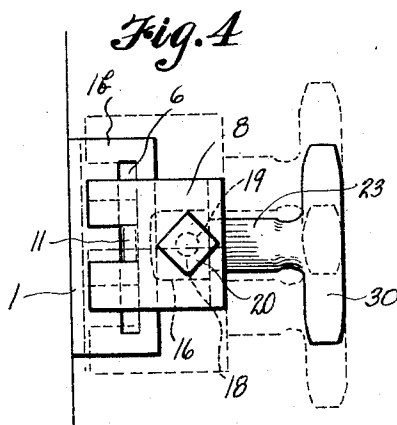


Fig. 4

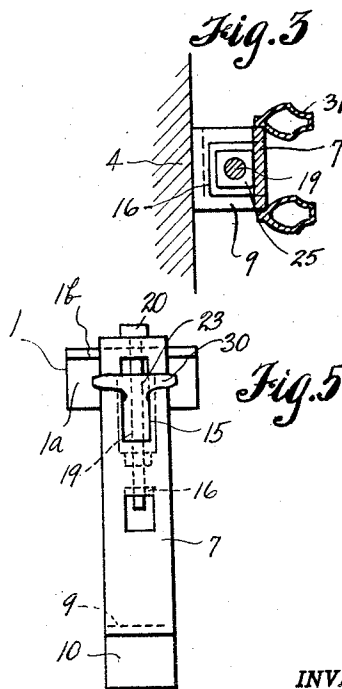


Fig. 5

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RADIATOR SUPPORTING HANGER

Application filed May 8, 1931. Serial No. 535,900.

This invention relates to improvements in radiator hangers, and it has reference particularly to devices of that character whereby steam or hot water radiators, as now extensively used in connection with heating systems, may be suspended from a wall or other support.

The principal object of the present invention is to provide a radiator hanger of the above character which may be easily and readily applied to the radiator and to its support and which provides for a certain amount of vertical and also lateral adjustment of the parts to suit pipe expansion or contraction and various connections, and which also makes possible a ready dismounting of the radiator when such is desired.

More specifically stated, the invention resides in the provision of a radiator hanger consisting of a mounting bracket adapted to be permanently attached to a wall, or other support, and a hanger that is adapted to be detachably suspended from the bracket and while suspended, to be laterally adjusted on the bracket and which is equipped with a radiator supporting arm that is vertically adjustable relative to the hanger.

Other objects of the invention reside in the details of construction and in the combination of parts and in their mode of operation, as will hereinafter be described.

In accomplishing these and other objects of the invention, I have provided the improved details of construction, the preferred forms of which are illustrated in the accompanying drawing wherein—

Fig. 1 is a perspective view of a radiator hanger embodied by the present invention, the hanger being shown disconnected from the supporting bracket.

Fig. 2 is a sectional view on a small scale, illustrating the application of the hanger to a supporting wall and its use for mounting a radiator.

Fig. 3 is a horizontal section on the line 3—3 in Fig. 2, showing the relation of the adjusting nut to the hanger.

Fig. 4 is a top or upper end view of the device, illustrating in dotted lines the lateral

adjustment of the hanger relative to its bracket.

Fig. 5 is a front view of the device, as shown in Fig. 2.

Referring more in detail to the drawing—

The device includes as a part thereof a suspending bracket 1 which, in a preferred form of construction, consists of a flat metal plate having a back or base portion 1a and an outwardly turned upper end flange 1b. The base portion is provided with a plurality of apertures 2 through which attaching screws 3 or bolts may be extended into a wall or other support 4 as shown in Fig. 2. The laterally turned flange 1b of the bracket is formed with a longitudinal slot 6 parallel with the forward edge of the flange.

The device also includes as a part thereof, a hanger member 7 formed from a flat strip of metal provided at its upper end with an intumed arm 8 to overlie and to be supported on the bracket flange 1b, and formed at its lower end with an intumed portion 9 which terminates in a downwardly extending leg 10. The upper end portion 8 of the hanger is provided near its end with a downturned lip 11 which extends downwardly through the slot 6, this lip being relatively narrow in width while the slot is quite long, which permits the hanger to be adjusted laterally relative to the bracket. The lower end portion 10 of the hanger is adapted to engage with the wall or support in order to hold the radiator parallel with the wall, as will presently be understood.

Formed in the upper end portion of the hanger plate 7, is a vertical slot 15 and spaced some distance below this is an inwardly turned flange 16. This flange is provided with a hole 17 in vertical alinement directly below a like hole 18 in the upper end portion 8 of the hanger. A bolt 19 extends downwardly through the holes of the arm and flange and its downward movement is limited by a square head portion 20 which rests against the arm.

Slidably mounted on the bolt between the arm and flange at the inner side of the hanger is a block 22 formed with a horizontally ex-

tending arm 23 which projects outwardly from the hanger through the slot 15. This block rests on a nut 25 that is threaded onto the bolt but which is held against rotation by reason of a flat face thereof resting flatly against the inner face of the hanger, as shown in Fig. 3. The block may be vertically adjusted by rotation of the bolt, thereby causing the nut to move upwardly or downwardly in accordance with the direction of rotation. At its outer end, the arm 23 has a transverse bar 30 and this is designed to interlock with and support the radiator that is applied thereto. In Fig. 2 I have shown a radiator 31 applied to the arm.

Assuming the parts of the device to be so constructed and assuming that the base flange 1a of the mounting bracket has been attached to a wall, or other support at or approximately at the right position for supporting the radiator, the hanger portion 7 is then applied to the radiator by turning the hanger to a horizontal position so that the cross bar 30 on the arm 23 may be extended between adjacent sections of the radiator. Then the hanger is turned to the vertical position, as in Fig. 2 so that the cross bar interlocks with the radiator sections and the plate fits snugly between two of the adjacent sections of the radiator, as shown in Fig. 3, and is thereby held securely against displacement. It will here be mentioned that it is desirable that the hanger 7 be bent slightly inward between its upper and lower ends so that it will provide an outward pulling tension on the arm 23 when it is applied to the radiator and this will prevent the device slipping downward on the radiator while the latter is being shifted into position for hanging it on the bracket.

The hanger is then applied to the bracket by seating the inner end of laterally turned arm 8 upon the outturned flange of the bracket with the prong 11 of the arm disposed within the slot 6 of the bracket. This prevents the hanger from being displaced, yet permits of a limited lateral adjustment of the hanger relative thereto as indicated in Fig. 4. If the radiator be adjusted vertically in an upward or downward direction, this is accomplished by rotation of the adjusting bolt 19 which raises or lowers the nut 25 and incidentally raises or lowers the block and the supporting arm from which the radiator is suspended.

Hangers of this character may be made in various sizes and of various materials, and it is quite apparent that details of construction and the proportion of parts might be changed without departing from the spirit of the invention, therefore it is not desired that the claims be limited only to the details shown, but that they be given an interpretation commensurate with the scope of the invention disclosed.

Having thus described my invention, what I claim as new therein and desire to secure by Letters Patent is:

1. A radiator hanger comprising a bracket portion adapted for fixed attachment to a supporting wall and having a hanger supporting flange formed with a longitudinal slot and a hanger having an inwardly turned upper end portion adapted to seat upon said flange and formed with a downturned lip projecting into the slot to prevent displacement on the hanger, and permitting of lateral adjustment of the hanger said hanger having an inwardly offset foot at its lower end engaging the wall, an arm mounted by the hanger to extend outwardly therefrom for mounting a radiator, and a bolt mounted in the hanger and supporting the arm and operable to adjust the arm vertically.

2. A radiator hanger comprising a bracket portion adapted for fixed attachment to a supporting wall and having a hanger supporting flange formed with a longitudinal slot and a hanger having an inwardly turned upper end portion adapted to seat upon said flange and formed with a downturned lip projecting into the slot to prevent displacement on the hanger, said hanger having an inwardly offset foot at its lower end engaging the wall, a vertical bolt rotatably mounted in the hanger but permitting lateral adjustment of the hanger, a block slidable on the bolt having an arm extended outwardly therefrom and mounting a radiator, a nut threaded on the bolt to support the block and engaging the hanger to prevent its rotation, and a head on the bolt whereby it may be rotated to adjust the nut and block vertically.

3. A radiator hanger comprising a bracket portion adapted for fixed attachment to a supporting wall and having a hanger supporting flange formed with a longitudinal slot and a hanger having an inwardly turned upper end portion adapted to seat upon said flange to suspend the hanger and formed with a downwardly projecting lip projecting into said slot to prevent displacement of the hanger from the bracket but permitting lateral adjustment thereof, said hanger having an inwardly offset foot at its lower end engaging the wall to retain the hanger in vertical position, a bolt extended rotatably through the upper end arm of the bracket, a bearing on the hanger rotatably containing the lower end of the bolt, a nut threaded on the bolt but held against rotation relative to the bracket, a block slidable vertically on the bolt and supported by the nut, an arm extended outwardly from the block, and a cross bar at the end of the arm for holding connection with a radiator supported by the arm.

Signed at Everett, Snohomish County, Washington, this 25th day of April, 1931.

CLYDE L. LYON.