

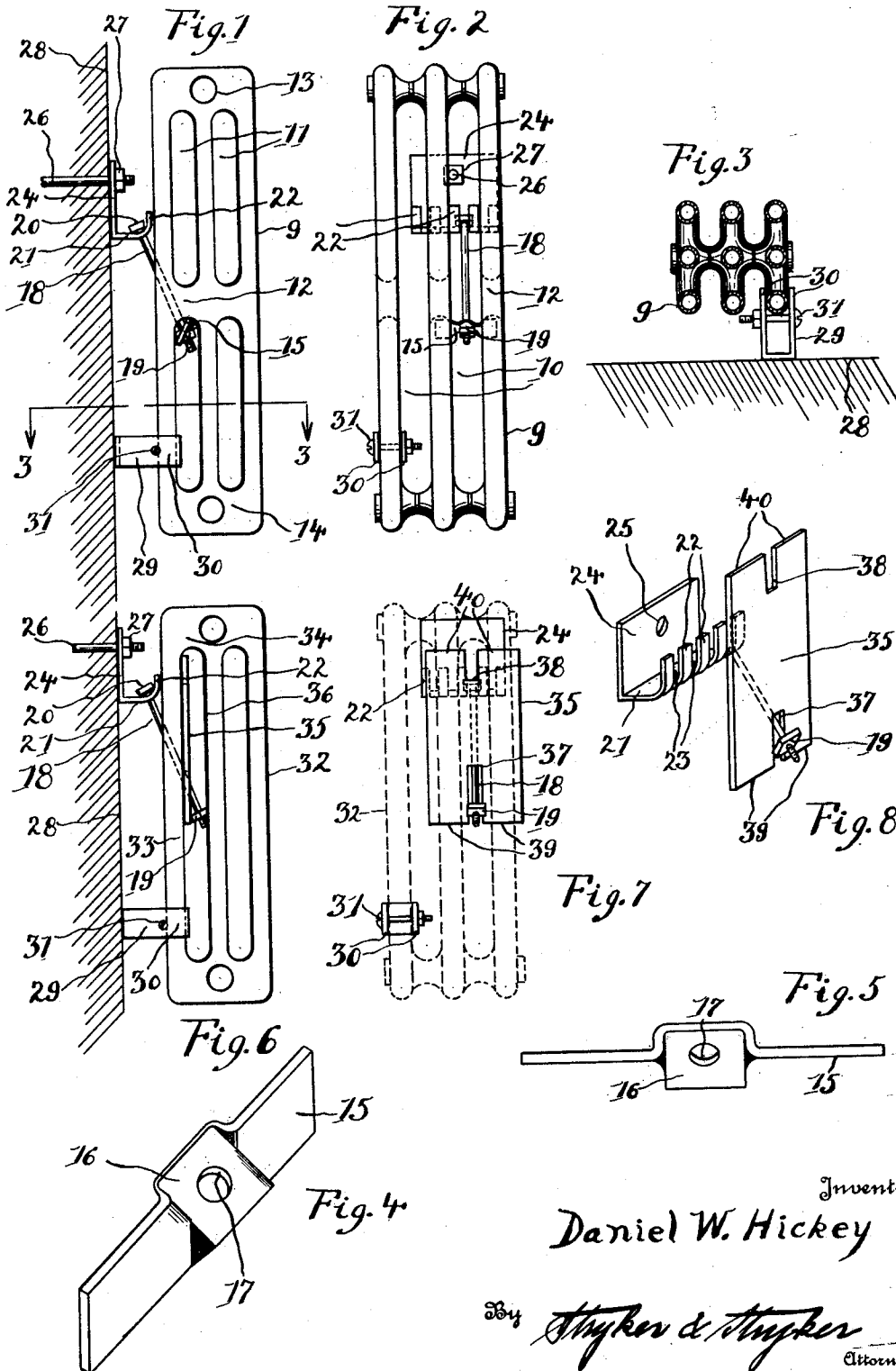
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RADIATOR HANGER

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RADIATOR HANGER

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This invention relates to hangers for supporting radiators of the modern type which vary in width between wide limits.

It is my object to provide a radiator hanger adapted to facilitate securing the radiators of various sizes upon a wall and to engage a part of a radiator which is uniformly spaced from the face of the radiator adjacent to the wall. Another object is to simplify the construction and reduce the cost of hangers of this type while providing adequate adjustments to compensate for the conditions met in practice.

In the accompanying drawing Figure 1 is a side elevation of a radiator of common type in position upon a wall and secured thereto by my improved hanger; Fig. 2 is a front elevation of the radiator and hanger looking toward the wall; Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 1; Fig. 4 is a perspective view of one form of plate or bar for engaging the radiator; Fig. 5 is a plan view of said bar; Fig. 6 is the end view of a radiator supported upon an alternate form of radiator engaging plate; Fig. 7 is a front elevation of the hanger shown in Fig. 6 with the position of the radiator indicated in dotted lines and Fig. 8 is a perspective view of the hanger and alternate form of radiator engaging plate.

As shown in Figs. 1 and 2, one common form of radiator 9 is made up of connected sections having spaces 10 between the sections and each section consists of a series of vertical tubes having openings 11 between them. About midway between the upper and lower ends of the radiator, transverse tubes 12 connect the vertical tubes and the radiator 9 has the usual transverse tubular portions 13 and 14 at the top and bottom of each section respectively. In the form of the invention shown in Figs. 1, 2, 4 and 5, I provide a bar 15 adapted to extend in the spaces 11 and to engage the radiator beneath the transverse tubes 12. This bar 15, as best shown in Figs. 4 and 5, consists of a long and relatively narrow plate having its ends extending in substantially the same plane and formed with a central bearing member 16, which is offset in a plane ob-

lique to the plane of the end portions. The central bearing member 16 has an opening 17 to receive an obliquely disposed rod 18. The lower end of the rod 18, which projects through the opening 17 in the bar 15, is fitted with a nut 19 for adjustably supporting said bar between sections of the radiator. On the upper end of the rod 18 is a head 20 adapted to be supported upon a flange 21, having an up-turned outer edge. A series of fingers 22 is formed in the up-turned edge of the flange 21 by cutting a series of parallel slots 23 extending downward from the upper edge of the flange. The shank of the rod 18 may be passed in any of the slots 23 at the open ends thereof. The flange 21 is formed on the lower edge of a wall engaging plate 24 which is perforated at 25 (Fig. 8) to receive an anchor bolt 26 of common type. A nut 27 is provided to fit a threaded end of the bolt 26 which projects from the wall 28.

The lower part of the radiator may be held in proper spaced relation to the wall by a spacer 29, having parallel gripping members 30 adapted to be clamped by means of a bolt 31 upon any conveniently located tube of the radiator.

Preparatory to supporting the radiator 9 upon the wall 28, the wall engaging plate 24 may be secured upon the anchor bolt 26 in the usual manner so that the flange 21 projects out from the wall in a substantially horizontal position. The spacer 29 is secured to the radiator as indicated in Figs. 1, 2 and 3. With the rod 18 separated from the wall engaging plate and with the bar 15 on the rod above the nut 19, said bar may be inserted in one of the openings 10 at the back of the radiator to engage the transverse tubes 12 of the adjacent sections. Obviously, to insert the bar 15 it is only necessary to turn it to a position where it extends obliquely to or along the opening 10 and after inserting it to a point in registry with to one of the openings 11, it may be swung upon the rod 18 to its normal position shown in Figs. 1 and 2, where it engages beneath the tubes 12 of adjacent sections.

When the bar 15 has thus been inserted into engagement with the radiator, the operator grasps the end of the rod 18 at the back of the radiator and retains the bar 15 in place while the radiator is lifted and the upper end of the rod 18 is passed between a pair of the fingers 22 which are in registry with the corresponding space 10 between sections. Finally the radiator is lowered until the head 20 of the rod 18 rests upon the flange 21 as shown in Figs. 1 and 2. By providing a multiplicity of the fingers 22 the necessity for accurate location of the anchor bolt 26 in the proper position upon the wall is obviated because a space between a pair of the fingers is thus provided for different positions of the radiator relative to the anchor bolt. Adjustment of the height of the radiator on the wall is provided for in the threaded nut 19 upon the rod 18. It will thus be evident that the radiator may be quickly and easily mounted upon the wall engaging plate 24 and when so mounted the tubes of the radiator adjacent to the wall abut against the fingers 22 while the lower part of the radiator is held in proper spaced relation to the wall by the spacer 29.

The alternate form of my invention, shown in Figs. 6, 7 and 8, is for hanging a radiator 32 which differs from the radiator shown in Figs. 1 and 2 in that the transverse tubes 12 are lacking and the connection with the radiator is made with tubes 33 adjacent to the wall and with transverse portions 34 at the upper extremities of the tubes 33. A rigid plate 35 is provided to be inserted in openings 36 between tubes in the sections and in substantially parallel relation to the wall. The wall engaging plate 24 and the spacer 29 of the alternate form are like those of the preferred embodiment and the suspension rod 18 is supported and extends obliquely between sections of the radiator as above described. The plate 35 has a slot 37 extending in from one edge and a slot 38 extending in from the opposite edge. The rod 18 with its nut 19 may be passed into either of the slots 37 or 38, to support the plate and radiator, as indicated in Figs. 6 and 7. The slot 37 is longer than the slot 38 and the plate 35 may be inverted so that either of these slots may be employed to receive the rod 18. Ends 39 and 40 of the plate 35 project laterally from the slots 37 and 38 to engage the adjacent radiator sections beneath the transverse tubes 34.

To hang a radiator with the plate 35, said plate is inserted in the opening 36 between tubes of the radiator so that either the end edges 39 or 40 engage the transverse tubes 34 of adjacent radiator sections. Now the rod 18 may be passed into the slot 37 or 38 (whichever of these is in the lower edge

of the plate) and either before or after connecting the rod 18 with the plates 35, the rod may be suspended from the fingers 22 of the wall engaging plate 24. By making the plate 35 invertible with the slots 37 and 38 of different lengths in opposite ends, a variation of the height at which the radiator is supported is afforded. Further adjustments of the height may be made by changing the position of the nut 19 upon the threaded end of the rod 18.

Obviously, in either of the forms of my invention described above, two or more of the hangers may be employed depending upon the length and weight of the radiator. It will now be evident that there are an unusually small number of parts of my device and that it may be made entirely from inexpensive sheet metal stampings and standard bolts. Thus the device is unusually simple and inexpensive.

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

1. In a hanger for a radiator having vertical tubes arranged in spaced sections, a wall engaging member, a rod supported at its upper end on said member and extending obliquely downward between sections of the radiator to be supported and a radiator engaging member supported upon the lower end of said rod and having laterally projecting portions spanning the space between sections of said radiator and engaging adjacent sections of the radiator.

2. In a hanger for a radiator having vertical tubes arranged in spaced sections, a wall engaging member, a rod supported at its upper end on said member and extending obliquely downward between sections of the radiator to be supported and a narrow and relatively long bar supported at its central part upon the lower end of said rod and having laterally projecting portions spanning the space between sections of said radiator and engaging adjacent sections of the radiator.

3. In a radiator hanger a wall engaging plate adapted to be secured to a wall, a flange on said plate projecting away from the wall an upwardly bent outer edge on said flange, said flange being formed with a plurality of slots extending toward the wall at the bend of said flange to receive a rod for supporting the radiator, a suspension rod insertible in any of said slots, said rod projecting obliquely downward between sections of the radiator and means on the lower end of said rod for supporting the radiator thereon, and projecting beneath adjacent sections of the radiator to positively support the same.

In testimony whereof, I have hereunto signed my name to this specification.

DANIEL W. HICKEY. 130