April 5, 1932. D. L. HEALY ET AL 1,852,841

RADIATOR HANGER

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Fig. 1

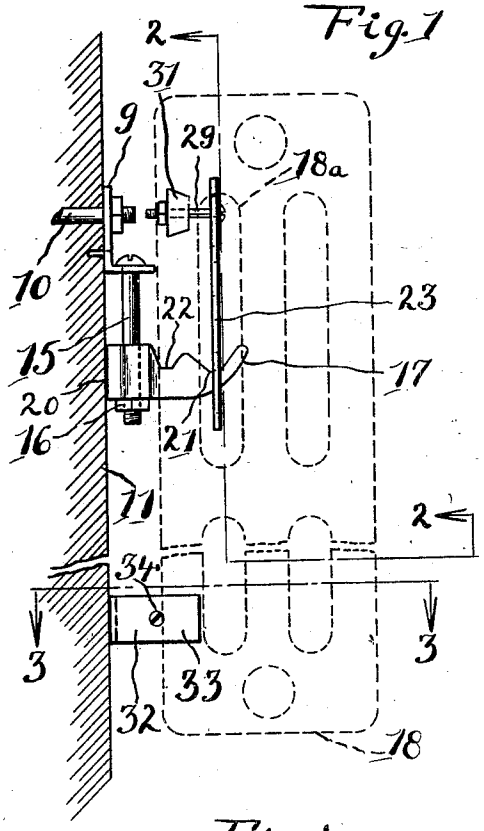


Fig. 2

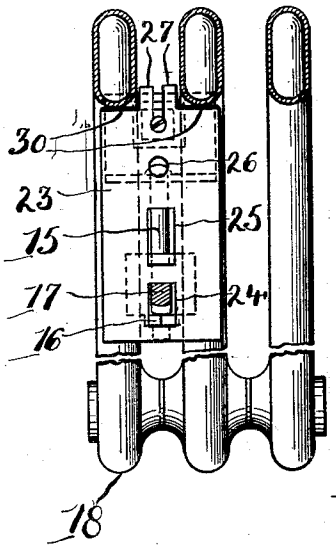


Fig. 3

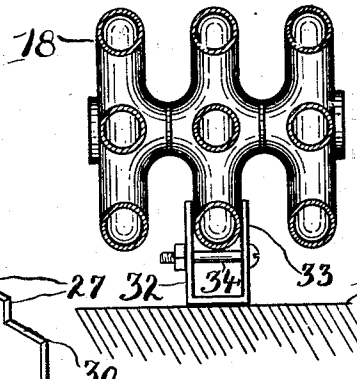
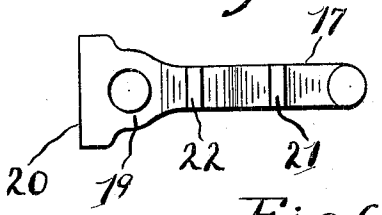


Fig. 4



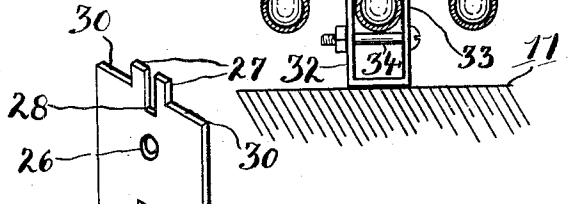


Fig. 5

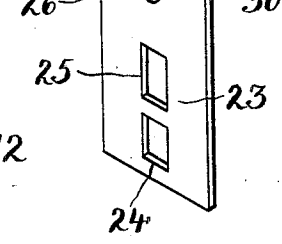


Fig. 6

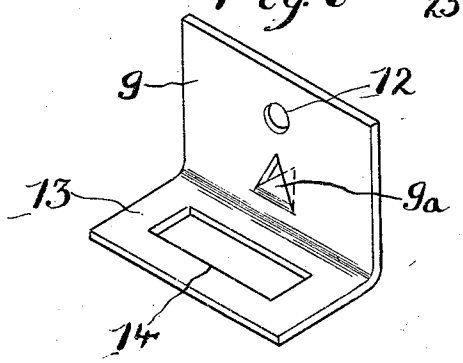


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Fig. 7

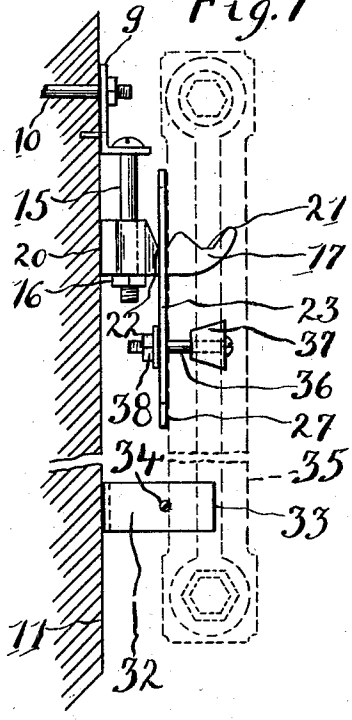
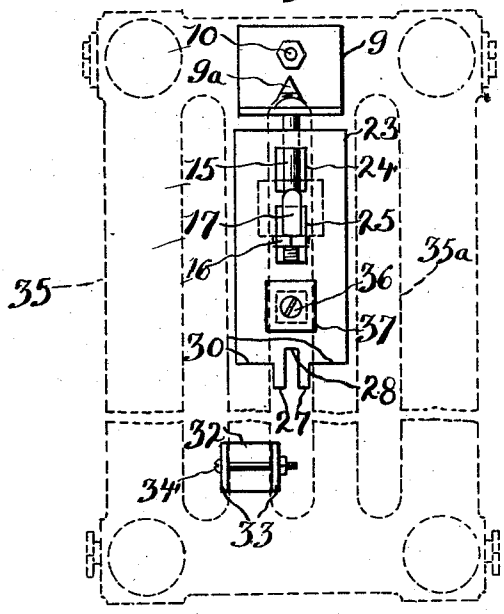


Fig. 8



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UNITED STATES PATENT OFFICE

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RADIATOR HANGER

Application filed October 22, 1928. Serial No. 314,282.

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

It is our object to provide a hanger adapted to support any of the modern radiators of the various sizes in common use and thereby make it unnecessary for a heating contractor to keep on hand more than one type and size of hanger. More particularly it is our object to provide a radiator hanger with means for engaging a part of such radiators which is not variously located in the radiators of different sizes and at the same time to provide an unusually strong and secure device designed to facilitate the adjustments necessary to properly position the radiator under the conditions met in practice.

In the accompanying drawings, Figure 1 is a side elevation of our improved radiator hanger in place on a wall and with a radiator indicated in dotted lines; Fig. 2 is a section taken on the line 2—2 of Fig. 1; Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 1; Fig. 4 is a plan view of the bracket arm; Fig. 5 is a perspective view of the radiator engaging and supporting plate; Fig. 6 is a perspective view of the plate for attachment to the wall; Fig. 7 is a side elevation showing the arrangement of the parts for hanging a radiator of the single column or wall type and with the position of the radiator indicated in dotted lines and Fig. 8 is a front elevation of the arrangement shown in Fig. 7.

We provide a wall engaging plate 9 adapted to be secured by a suitable anchor bolt 10 upon a wall 11, the bolt 10 being inserted through a hole 12, shown in Figure 6. Upon its lower edge the plate 9 has a flange 13 projecting horizontally away from the wall and formed with an opening 14 to receive and support a suspension bolt 15. A tooth 9*a* projects from the back of the plate 9 to prevent tilting on the wall. Supported by a nut 16 on the lower end of the bolt 15 is a bracket arm 17, adapted to project between the sections of the radiator 18. The arm 17 has a sleeve portion 19 to receive the bolt 15 and a flat bearing surface 20 for engaging the wall 11. In the upper surface of the arm 17 is formed depressions 21 and 22 in which a radiator engaging plate 23 may be supported as hereinafter described. This plate 23 is preferably made of heavy sheet metal and has openings 24, 25 and 26 disposed along its normally vertical center line. Lugs 27 project from one end of the plate 23 and a slot 28 is formed between the lugs 27 to receive a bolt 29. The bolt 29 is provided to secure the plate 23 to the radiator as in Figs. 1 and 2, where it is shown in the space between columns and on the outer surface of the columns nearest the wall. The plate 23, when thus inserted, extends with its laterally projecting edges 30 in position to support the radiator from its upper portion by engaging beneath the transversely extending portions of the tubes. The openings 24 and 25 in the plate 23 are designed to selectively receive the bracket arm 17 and to engage the same in the depression 21 in said arm. To facilitate securing the plate 23 to the radiator in this position, a tapered head 31 may be placed in engagement with the radiator between sections and a nut on the end of the bolt may be tightened to retain the plate. To hold the lower portion of the radiator in proper spaced relation to the wall we prefer to employ a spacer 32 like that described and claimed in the copending application of De Witt C. Ruff, 2d, filed June 30, 1928, Serial Number 289,380. Parallel gripping members 33 of the spacer 32 are arranged to be clamped in convenient position upon one of the radiator tubes by means of a bolt 34 (see Figs. 1 and 3).

In use, before the radiator 18 is hung upon the wall, the plate 23 may be secured in place between the columns by means of the bolt 29 and head 31, said bolt extending in the slot 28. To hang a radiator a wall engaging member 9 is secured upon the wall 11 by the anchor bolt 10 in the usual manner, the tooth 9*a* being embedded in the wall to prevent tilting of the flange 13 out of its substantially horizontal position. With the spacer member 32 secured to the lower portion of the radiator the latter is raised and the arm 17 caused to pass between sections and through the opening 24 or 25 in the plate 23. Now the weight of the radiator may be placed on

the hanger and the retaining bolt 29 removed, if desired, by loosening the nut on its inner end. As the spacing of openings 18*a* from the inner surface on the radiators of different widths does not vary, it will be evident that the plate 23, when secured in said opening, is uniformly spaced from the wall irrespective of the size or number of columns of the radiator. The lugs 27 project between sections to properly center the plate 23 and insure the engagement of both edges 30 with adjacent sections. The elongated opening 14 permits adjustment of the position of the bracket arm 17 to register with the space between sections where the openings 24 and 25 are located. Adjustments of the height of the radiator upon the wall are provided for in the nut 16 and openings 24 and 25 into which the arm 17 may be selectively inserted.

In the arrangement of our hanger, shown in Figs. 7 and 8, we have provided for the hanging of a radiator 35 of the single column or wall type which is without openings corresponding to the openings 18*a*, (Fig 1). With a single column radiator the wall engaging member 9 and bracket arm 17 are secured upon the wall as above described but the plate 23 is inverted, as clearly shown in Fig. 8, and secured upon the surface of the radiator adjacent to the wall. To secure the plate 23 upon the radiator a bolt 36 is inserted through the opening 26 in the plate 23 and a head 37, having a bore to receive the bolt 36, is placed in engagement with the radiator in one of the vertical openings 35*a*, Fig. 8. By tightening a nut 38 upon the inner end of the bolt 36, it will be understood that the plate 23 may be clamped at any desired height upon the inner surface of the radiator.

With the plate 23 in this position the bracket arm 17 may be caused to engage the plate 23 in the opening 25. The depression 22 in the arm 17 is employed to retain the plate 23 at the proper distance from the wall in the arrangement of the hanger shown in Figs. 7 and 8, the spacing member 32 being further employed for this purpose. It will thus be seen that in this alternate arrangement of our invention the plate 23 becomes a suspension member whereas in the arrangement shown in Figs. 1 and 2 it is under compression by the application of the weight to its upper edge.

Having described our invention what we claim as new and desire to protect by Letters Patent is:

1. In a radiator hanger a wall engaging member, an arm suspended from said member and arranged to project between sections of a radiator for supporting the same and a plate adapted to be held in engagement with the tubes of a radiator in substantially parallel relation to the wall, said plate being arranged to span the space between sections of the radiator and to engage said sections to support the radiator and being formed with an opening to receive said arm, said arm being insertable in said opening to support the plate and radiator.

2. In a radiator hanger a wall engaging member, a bracket arm suspended from said member and arranged to project between sections of a radiator for supporting the same, a plate insertable between the tubes of a radiator in substantially parallel relation to the wall, said plate having laterally projecting portions for engaging the upper part of at least two adjacent sections of the radiator and being formed with an opening to receive said arm, said arm being insertable in said opening to support the plate and radiator and a projection on said plate to maintain the same in properly centered relation to the radiator sections.

3. A radiator support comprising a bracket, a bolt supported thereby, a hanger member comprising a sleeve having a vertically disposed web projecting outwardly therefrom, the sleeve being slidable up and down on the bolt, and the outer end of the web having an upwardly projecting pin, an adjusting nut on the bolt, under the sleeve, and a plate adapted to fit between the tubes of a radiator and detachably engaging the pin.

In testimony whereof, we have hereunto signed our names to this specification.

DENNIS L. HEALY.
DE WITT C. RUFF, 2D.