March 15, 1927. 1,620,632

J. F. BRODERICK

SUPPORT FOR RADIATORS AND THE LIKE

Filed Oct. 27, 1925

Fig. 1.

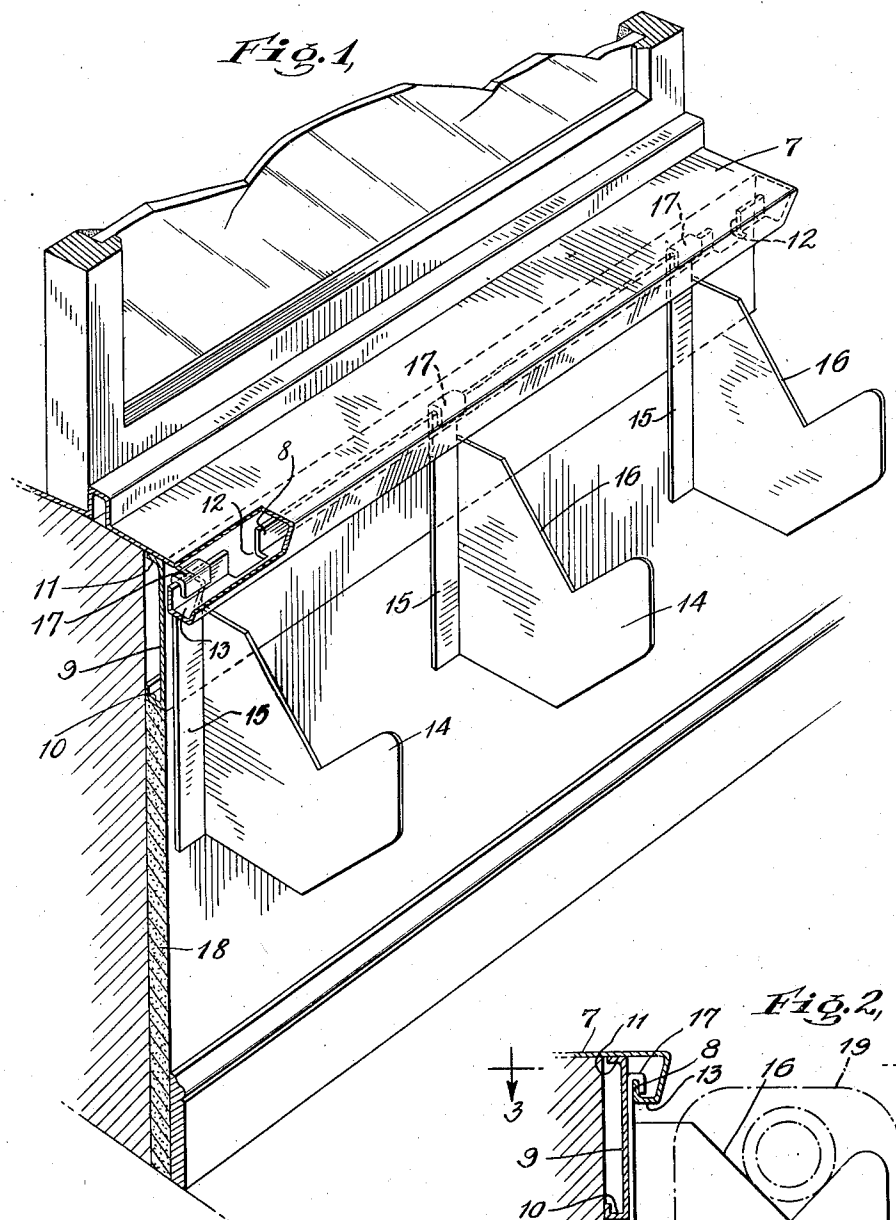


Fig. 2.

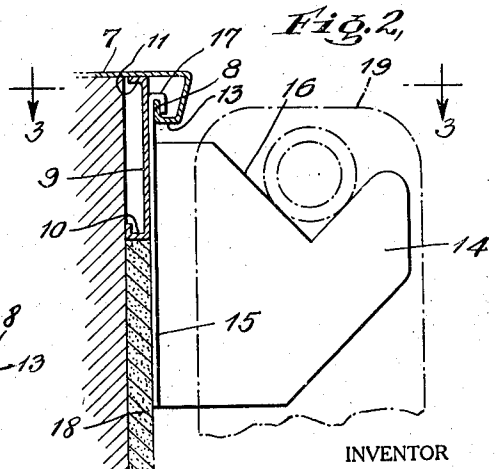
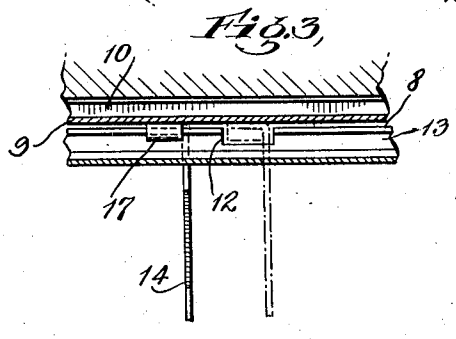


Fig. 3.



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Patented Mar. 15, 1927. 1,620,632

UNITED STATES PATENT OFFICE.

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SUPPORT FOR RADIATORS AND THE LIKE.

Application filed October 27, 1925. Serial No. 65,216.

This invention relates generally to radiators in steam and hot water heating systems, with more particular reference to means for supporting the radiator.

In modern building construction, it has been found desirable to hold the radiators in suspension at a suitable distance from the floor, thereby dispensing with legs or standards and providing a clear space underneath the same which may at all times be kept clean and sanitary.

The elimination of legs and the provision of suspending devices for radiators and coils is by no means a new idea in the art, but heretofore, so far as I am aware, the supports have either been permanently built into the wall while the building was in process of construction, or have necessitated the use of bolts, rivets, or the like in attaching them either to the wall of the building or to a sheet-metal or other type of window-sill. The first mentioned method of mounting radiator supports is objectionable, in that bricklayers and masons are often careless and do not locate the supports in proper positions, and when so mounted it is impossible without excessive cost to change their locations or to provide any practical means of adjustment. The second-mentioned method of attachment is objectionable, not only on account of the permanency of the connection, subject possibly to a very slight degree of adjustment, and the destructive character of any operation performed to remove or change the location of the hangers, but also because such installation necessitates the employment of tools and is relatively very costly.

The principal objects of the present invention are, first, the provision of an exceedingly simple and inexpensive but in every way dependable hanger, which may be readily secured to and detached from a window-sill without tools and in the shortest possible period of time; second, the provision of such a hanger which may be easily and readily adjusted in position at any point throughout the entire length of the sill; and, third, the provision of connecting means between the hanger and the sill or other support which is entirely concealed from ordinary observation.

My invention will be more readily understood by referring to the accompanying drawings, forming a part of this specification, in which—

Fig. 1 is a perspective view, partly broken away and partly in section, of a practical and convenient embodiment of my invention;

Fig. 2 is a fragmentary vertical cross-section of the same, and

Fig. 3 is a horizontal section taken substantially on the line 3—3 of Fig. 2.

Referring now to the drawings in detail, numeral 7 designates a common and well-known general type of sheet-metal window-sill in use in buildings of so-called fireproof construction. As shown, this sill projects beyond the inner line of the building wall, and the inner edge thereof is angularly bent into channel form, as best shown in Fig. 2, to form what may be termed the semblance of a moulding. This edge is so bent that the extreme end 8 thereof is upturned and forms a vertically disposed interior tongue extending the length of the sill.

In mounting this sill 7, an apron 9 is generally provided, this apron consisting of a channel-iron of substantial width, one flange providing a base 10 and the other a shelf 11, said base usually abutting the plastering 18 which is flush with the exposed face of said apron. The shelf 11 supports the projecting portion of the sill, to which it may or may not be attached, but, if attached, the attachment should desirably be by means which cause no break in the smooth, non-dust-collecting upper face of the sill—as, for instance, by welding.

The sill 7 is of such width and the bent portion thereof so proportioned that the tongue 8 will be spaced from the contiguous face of the apron 9 a distance which is slightly in excess of the gauge of the sheet-metal employed, and the upper edge of said tongue is spaced a substantial distance from the lower face of the flat portion of the sill 7.

At one end, and desirably at both ends, of the sill, I provide a slot 12, this slot passing through the tongue 8, as well as extending a short distance into the lower face 13 of the bent portion of the sill, as clearly shown in Figs. 1 and 3.

The hanger proper consists in a bracket stamped from sheet metal and comprising a plate 14 having a rectangular flange 15

along what may be termed the side edge thereof and being provided with a desirably angular depression or recess 16 in its horizontal or upper edge. The flange 15 projects above the upper edge of the plate 14, and the upper end thereof is bent upon itself to form a hook 17. The dimensions of the hook 17 and the dimensions of the slot 12 are so proportioned that said hook may be readily passed through said slot, and it will be apparent that when the hook is in uppermost position the bracket as a whole may be slid in either direction, and thereupon the hook will be brought into engaging position with the tongue 8.

Particularly when the apron 9 is inset in the plastering 18, it will be apparent that an exceedingly strong and dependable hanger is provided, capable of supporting many times the weight of any standard size of radiator or coil, but even in the absence of the plastering, the apron 9 by itself provides sufficient bearing surface to insure the requisite strength and dependability, the building wall being the ultimate support in any circumstances.

In Fig. 2 I have shown in broken lines the upper portion of a well-known type of two-column radiator, and it will be readily seen that the same may be removed from the hanger, either for repair or replacement, or for removal of the fixtures, and that upon removal of the latter the sill or support is in apparently unbroken and finished condition.

For the purpose of description, the bent portion of the metal plate providing the sill 7 may be said to provide a channel within which the extreme edge of said plate is upwardly bent to provide what may be termed a supporting track-rail, and it will be apparent that the hook 17 of the bracket 14 may be passed through a slot 12 to position the same to be slid longitudinally, in either direction, into engagement with said track-rail to selective location for the hanging thereon of a radiator 19, coil or the like.

Many modifications of minor details of my improved radiator support will doubtless readily suggest themselves to those skilled in the art to which it appertains, and I therefore do not desire to limit my invention to the specific construction and assembly herein shown and described.

I claim as new and desire to secure by Letters Patent:

1. In a device of the character described, the combination, with a sheet-metal plate adapted to provide a window-sill or the like, said plate being bent to provide a longitudinal channel extending the length thereof with the edge of said plate projecting vertically into said channel and forming a track-rail, of a sheet metal bracket having a substantially rigid, vertical, outwardly projecting plate provided at its upper edge with means adapted to engage a radiator member for radiator support, said bracket also having a rectangular flange at its supported edge, said flange projecting upwardly beyond the upper edge of said bracket and being provided at its upper end with a hook adapted to engage said rail and be slidable thereon, and said plate being provided with a bottom opening connecting with the channel to afford access for said hook to the interior of said channel in position for slidable engagement with said rail.

2. In a support for radiators and the like, the combination, with a horizontally disposed sheet-metal plate adapted to be permanently mounted in the wall of a building and project laterally into the interior thereof, a sheet-metal apron permanently mounted to support the projecting portion of said plate and including a vertically disposed wall, the projecting edge of said plate being bent longitudinally to provide a substantially enclosed and vertically disposed flange spaced from said apron wall and the edge thereof spaced from said plate, the bottom of the bent portion of said plate being provided with a longitudinal slot which extends vertically through said flange, of a bracket provided at its upper end with a hook adapted to be passed through said slot and be moved longitudinally into engagement with said flange.

3. In a support for radiators and the like, the combination, with a horizontally disposed sheet-metal plate adapted to be permanently mounted in the wall of a building and project laterally into the interior thereof, a sheet-metal apron permanently mounted to support the projecting portion of said plate and including a vertically disposed wall, the projecting edge of said plate being bent longitudinally to provide a substantially enclosed channel with a vertically disposed flange therein spaced from said apron wall and the edge thereof spaced from said plate, of a sheet-metal bracket having a rectangular flange at its supported edge, said flange projecting upwardly beyond the upper edge of said bracket and being provided at its upper end with a hook adapted to engage said first-mentioned flange and be slidable thereon, and said channel being provided with a bottom opening to afford access for said hook to the interior of said channel in position for slidable engagement with said rail.

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