

J. R. LAKE.
BRACKETED SHELVING.
APPLICATION FILED JUNE 12, 1902.

NO MODEL.

Fig. 1.

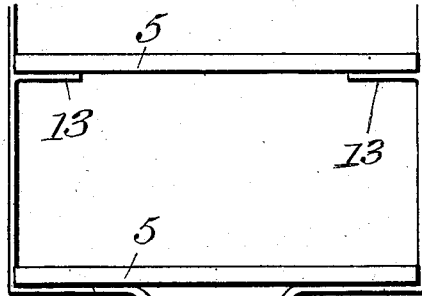
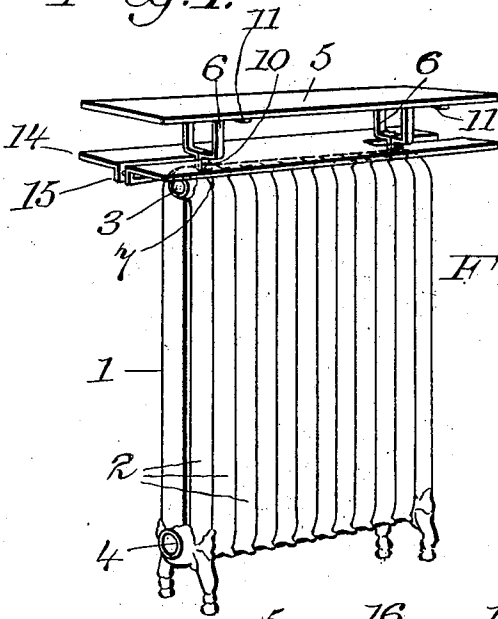


Fig. 2.

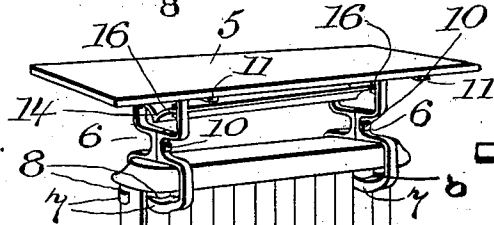
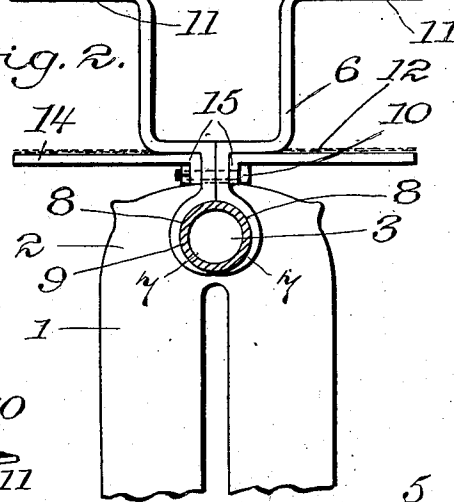


Fig. 3.

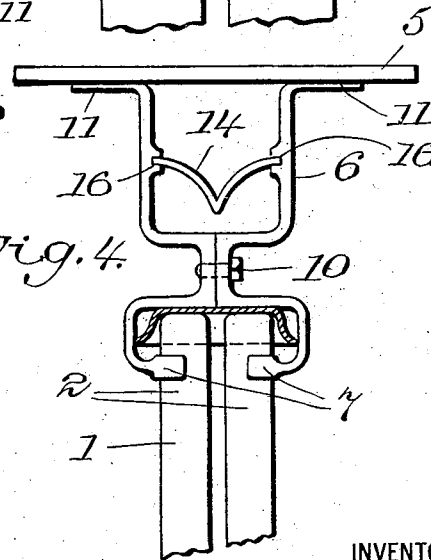
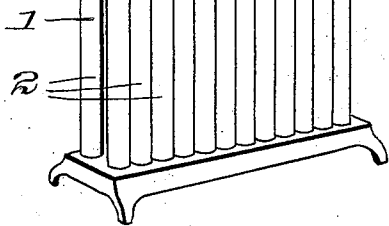
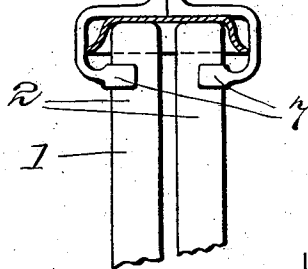


Fig. 4.



WITNESSES:

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BRACKETED SHELVING.

SPECIFICATION forming part of Letters Patent No. 727,157, dated May 5, 1903.

Application filed June 12, 1902. Serial No. 111,300. (No model.)

To all whom it may concern:

Be it known that I, JAMES R. LAKE, a citizen of the United States of America, and a resident of Milburn, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Bracketed Shelving, of which the following is a specification.

My invention relates generally to shelving and is specifically designed to produce an improved form of bracket attachable to the coils or sections of steam or hot-water radiators or the like whereby such radiator coils or sections may be utilized as a pedestal or support for one or more shelves.

Ordinarily in setting up the radiators of a heating system in houses or apartments considerable floor-space is occupied, and heretofore such space has been entirely lost for use to the tenant unless, as frequently happens, articles are thoughtlessly placed upon the radiators at the risk of being badly damaged or ruined if allowed to remain any length of time.

It is the object of the present invention, therefore, to render available the space occupied by radiators by adapting the latter to serve as a base or support for shelving, at the same time protecting the shelving from the current of hot air by directing the flow outward away from the same.

The preferred embodiment of the invention is illustrated in the accompanying sheet of drawings, throughout the several views of which like reference-numerals indicate corresponding parts.

In the drawings, Figure 1 is a view in perspective of a radiator, showing the bracketed shelf in position thereon. Fig. 2 is a view partly in section, showing a number of shelves bracketed to the radiator. Fig. 3 is a perspective view of another form of radiator, illustrating the application of the bracketed shelf thereto; and Fig. 4 is an end view thereof, with the radiator-cap shown in section.

Referring the drawings, 1 represents a self-sustaining support, base, or pedestal of a form designed to stand upon the floor away from and clear of the wall. One form of support of this character is found in the ordinary steam-radiator, the sections 2 2, &c., of which are united in a well-known manner by upper

and lower connections 3 4. Above the support one or more shelves 5 5, &c., are arranged and may be rigidly secured in fixed relation as a permanent structure or hinged or otherwise interconnected or, in fact, mounted in any manner desired. As shown, the shelf or shelves are supported above the radiator by means of brackets 6 6, which may be of any suitable form or construction, but are preferably provided with a pair of clamps 7 7 at their lower ends and one or more shelf-supporting arms at their upper ends. Each bracket is cast in halves, which at their lower ends are formed with semicircular recesses 8 8, which when combined, as shown in Figs. 1 and 2, encircle and clamp one of the tubular connections 9 between adjoining sections of the radiator and are thus secured by a set-screw or bolt 10. The particular form of clamp is not important and may be changed as required in order to adapt it to other forms of radiators. In Figs. 3 and 4, for example, an old style of radiator is shown formed of a series of upright tubes supported in a base-casting and inclosed at their upper ends by a cap. In order to adapt the bracket to this radiator, the members thereof are cast or bent around to straddle the radiator-cap and engage oppositely-disposed tubes thereof, such bracket members being detachably secured together and clamped upon the radiator by a set-screw or bolt 10, as above described. At a point above the set-screw or bolt the bracket members extend outward in opposite directions, then upward, and again outward, as represented at 11 11, to provide horizontal supports for a shelf 5, which latter is secured thereon in any suitable manner. When more than one shelf is employed, the portions 11 11 of the brackets may be continued outward to the edge of the lower shelf, then upward, and either turned in or provided with horizontal extensions 13 13 to serve as supports for a second or third shelf, as shown in Fig. 2.

In order to protect the shelf or shelves and contents from the direct action of the upward-flowing current of hot air, a deflector is interposed between the radiator and the lower shelf. This deflector may be of any suitable shape or size and arranged in any desired manner to serve in directing the heated air

outward away from the shelving. As shown in Figs. 1 and 2, it consists of a plate 14, which when of metal may, if desired, be adapted to serve as a shelf by being covered or coated with non-heat-conducting material 12, as indicated by dotted lines in Fig. 2, as a protection to articles placed thereon. Extending lengthwise of the plate along its under side a rib or bar 15 is formed or secured, the same being of approximately square or other cross-section suitable to provide a broad bearing upon the radiator-sections. The plate is notched at its ends in the line of the rib or bar to straddle or fit around the brackets at the point where the clamp-bolt is located and is firmly secured thereto by such bolts, with the under side of the rib or bar bearing directly upon the radiator-sections. The bolt-openings in the rib are preferably elongated, as best shown in Fig. 1, to permit endwise adjustment in adapting the shelving to radiators of different lengths. In addition to its functions as a heat-deflector and shelf the plate 14, secured as described, serves also to prevent the shelving from swinging or being forced out of a true vertical position, as might otherwise occur from excessive weight unevenly distributed upon one or more of the shelves. It will be seen that the radius of the curve forming the top of the radiator-sections is much greater than the radius of the connection from the center of the tubular connection on which the brackets are clamped to the under side of the central rib on plate 14, and the ribbed deflector-plate in being secured to the brackets and bearing upon the radiator-sections locks the brackets securely against turning about their supports. When the form of clamp employed or the manner in which it engages the radiator obviates any tendency of the shelving to swing out of position, other forms of deflector-plate may be employed—such, for example, as shown in Figs. 3 and 4, in which a plate of approximately V-shaped cross-section extending lengthwise from one bracket to the other bridges the space between individual bracket members and is supported in notches 16 16, formed between lugs integral therewith.

The above-described arrangement of shelving above radiators utilizes space heretofore lost to the occupant of the house or apartment and serves every purpose of the ordinary bookcase or shelf-cabinet. The bracket is simple, cheap, and effective for its intended purpose and may readily and conveniently

be secured in position by unskilled persons or removed with equal readiness. The shelving in being protected from the direct flow of hot air from the radiator affords a safe support for delicate and valuable articles, &c.

It will be understood that I do not wish to limit myself to the exact form or arrangement of shelf-bracket herein shown and described, as various changes might be made without departing from the spirit and scope of my invention. Other means for locking the brackets securely against turning about their supports and other means for clamping the bracket upon the radiator might be employed, or the bracket might be differently arranged thereon. Other means for deflecting the current of hot air might be substituted for the plate shown; but all such modifications I consider obvious and immaterial variations of form and not of substance and still within the meaning of the present invention.

Having, therefore, described my invention, I claim—

1. The combination of a radiator as a support for one or more shelves, a pair of brackets adapted at their lower ends to grasp the radiator, adapted at their upper portions for supporting a set of shelving, and means for clamping said brackets together about said radiator and shelves.

2. The combination of a radiator as a support for one or more shelves, a pair of brackets adapted at their lower ends to grasp the radiator, adapted at their upper portions for supporting a set of shelving, and means for clamping said brackets together about said radiator and shelves, together with a heat-deflector and means for supporting the same below the shelves.

3. The combination of a radiator as a support for one or more shelves and means for detachably mounting the shelf or shelves thereon, said means comprising duplicate brackets each consisting of twin members combining at their lower ends to clamp the support and extending upward and outward as a carrier for one or more shelves, together with a heat-deflector interposed between the support and the adjoining shelf.

Signed at New York this 10th day of June, 1902.

JAMES R. LAKE.

Witnesses:

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JULIUS SNOWDEN.