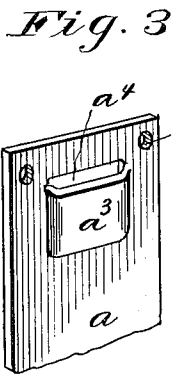
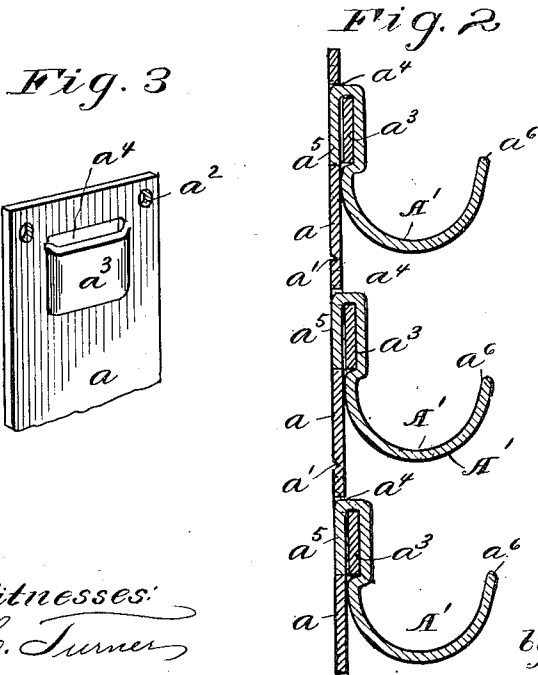
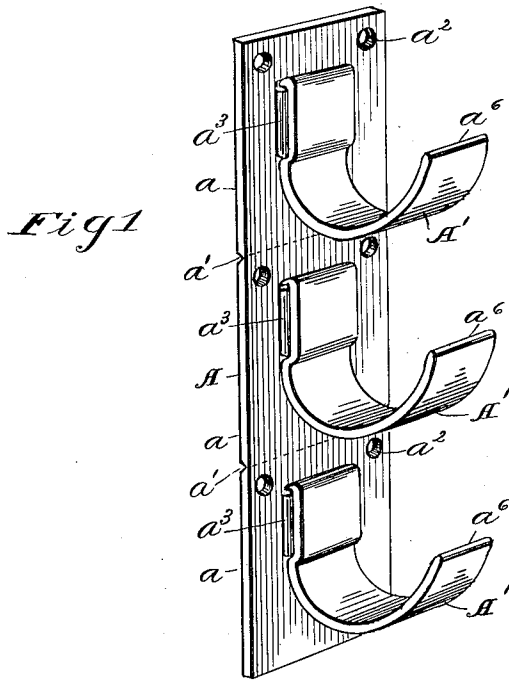


No. 887,272.

PATENTED MAY 12, 1908.

H. J. ROBINSON.  
WALL SUPPORT FOR PIPES.  
APPLICATION FILED APR. 9, 1907.



Witnesses:  
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his attorney

# UNITED STATES PATENT OFFICE.

HENRY J. ROBINSON, OF CLEVELAND, OHIO.

## WALL-SUPPORT FOR PIPES.

No. 887,272.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed April 9, 1907. Serial No. 367,206.

To all whom it may concern:

Be it known that I, HENRY J. ROBINSON, citizen of the United States, resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful improvement in Wall-Supports for Pipes, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

My invention relates to improvements in steam fittings and particularly to an improved type of hook and ring plate for radiator pipes and the like.

The object of said invention is to provide a plate of this character that will be simple and economical in construction, and that will be adapted to be directly applied against any flat surface such as a wall.

Said invention consists of the means hereinafter fully described and particularly pointed out in the claims.

The annexed drawing and the following description set forth in detail certain means embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawing:—Figure 1 represents in perspective a plate provided with a plurality of hooks for receiving radiator pipes or the like wherein is embodied my improved mode of construction; Fig. 2 is a central vertical cross-section of such hook plate; and Fig. 3 is a perspective view of a portion of such plate with the hooks removed therefrom.

As the base of my improved pipe supporting device, I utilize a plate A preferably made of sheet metal having proper superficial dimensions and of requisite thickness to adapt it to sustain the load which it is intended to support. This plate, as is the ordinary practice, is grooved or notched on one of its faces at intervals, as at  $a'$ ; whereby it is divided into sections  $a$  that can be readily severed one from the other by bending the plate at the lines of the said grooves without the use of any cutting tool. Each of the sections  $a$  is provided furthermore with a proper number of apertures  $a^2$  for the reception of screws or the like whereby such plate, whether comprising one or a number of the sections in question, may be secured to the wall. Each of the sections  $a$  is provided with a transversely disposed rectangular em-

bossed portion  $a^3$  projecting on its front or forward side. Contiguous to the upper edge of such embossed portion, in the form of the supporting plate shown in the first three figures, is provided an aperture or transverse slot  $a^4$  through which is inserted the re-curved foot  $a^5$  of the pipe-retaining member, in this case consisting of a hook A'. Such re-curved foot after insertion through the slot is bent against the raised or embossed portion  $a^3$  so as to lie substantially flush with the rear surface of the base plate A. It will thus be seen that there is no projection whatever on the rear side of the latter to prevent a close fit being made with the surface of the wall, or block such as is usually employed in this connection against which the supporting device is designed to be secured. The body of such clip or hook is itself pressed flat against the face of embossed portion  $a^3$  and bent inwardly therebelow so as to contact with the face of said plate before curving outwardly to form the pipe rest proper.

The outer or projecting portion  $a^6$  of the hook A' may obviously be of any desired length and is preferably sufficiently long to not only afford a firm rest for the pipe, that it is to receive, but also to permit of the outer tip portion  $a^6$  being bent slightly inwardly to clasp or partially inclose said pipe.

By making the depth of the recess formed behind embossed portion  $a^3$  substantially equal to the thickness of the foot  $a^5$  of the clip, the latter will not only lie flush with the rear surface of the plate A, but will also obviously engage the upper edge of the aperture  $a^4$  Fig. 2, thereby locking the clip against displacement. In order to still further secure the clip in place, I may, in addition to pressing its base against the face of embossed portion  $a^3$  in the manner previously described, bend it inwardly below such boss so as to contact with the face of the plate.

From the preceding description of the construction of my improved wall support for pipes and the like it will be obvious that a minimum amount of material is required for the construction of the same having regard to the strength provided thereby; furthermore that by having the rear surface of the base plate smooth and without obstruction as is done here, it is made possible to attach such plate solidly to the wall without it being necessary to prepare the same for the reception of the projections as would be the case if the present type of support were employed.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any one of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:—

1. In a device of the character described, the combination with a supporting plate having an embossed portion and an aperture contiguous thereto, of a pipe retaining clip having its foot inserted through such aperture, the recess formed behind such embossed portion being substantially equal in depth to the thickness of such foot whereby the latter lies flush with the rear surface of the plate and, by engaging the edge of such aperture, locks said clip against displacement.

2. In a device of the character described, the combination with a supporting plate having an embossed portion and an aperture contiguous thereto, of a pipe retaining clip having its foot recurved and inserted through such aperture and its base pressed flat against the face of such embossed portion, the recess formed behind such embossed portion being substantially equal in depth to the thickness of such foot, whereby the latter lies flush with the rear surface of the plate and, by engaging the upper edge of such aperture, locks said clip against displacement.

3. In a device of the character described, the combination with a supporting plate having an embossed portion, of a pipe retaining member secured to the face of said plate, said member having its foot inserted behind such embossed portion, and being itself bent so as to contact with the face of said plate below such portion.

4. In a device of the character described, the combination with a supporting plate having an embossed portion, of a pipe retaining member secured to the face of said plate, said

member having its foot inserted behind such embossed portion, and being itself pressed flat against the face of the same and bent inwardly therebelow so as to contact with the face of said plate.

5. In a device of the character described, the combination with a supporting plate having an embossed portion, of a pipe-retaining member secured to the face of said plate by having its foot inserted behind such embossed portion and lying substantially flush with the rear surface of the plate, the face of said clip being pressed flat against the front of such embossed portion and bent inwardly therebelow so as to contact with the face of said plate.

6. In a device of the character described, the combination with a supporting plate having an embossed portion and an aperture contiguous thereto, of a pipe-retaining clip having its foot recurved and inserted through such aperture, such foot lying substantially flush with the rear surface of the plate and the base of said clip being pressed flat against the face of such embossed portion and bent inwardly therebelow so as to contact with the face of said plate.

7. In a device of the character described, the combination with a supporting plate having a transversely disposed rectangular embossed portion and a transverse slot contiguous to the upper edge of said embossed portion, of a pipe-retaining clip having its foot recurved and inserted through such slot, such foot lying substantially flush with the rear surface of the plate, and the base of said clip being pressed flat against the face of such embossed portion and bent inwardly therebelow so as to contact with the face of said plate.

Signed by me this 4th day of April, 1907.  
HENRY J. ROBINSON.

Attested by—  
D. T. DAVIES,  
JNO. F. OBERLIN.