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HANDLING ATTACHMENT FOR RADIATORS AND THE LIKE

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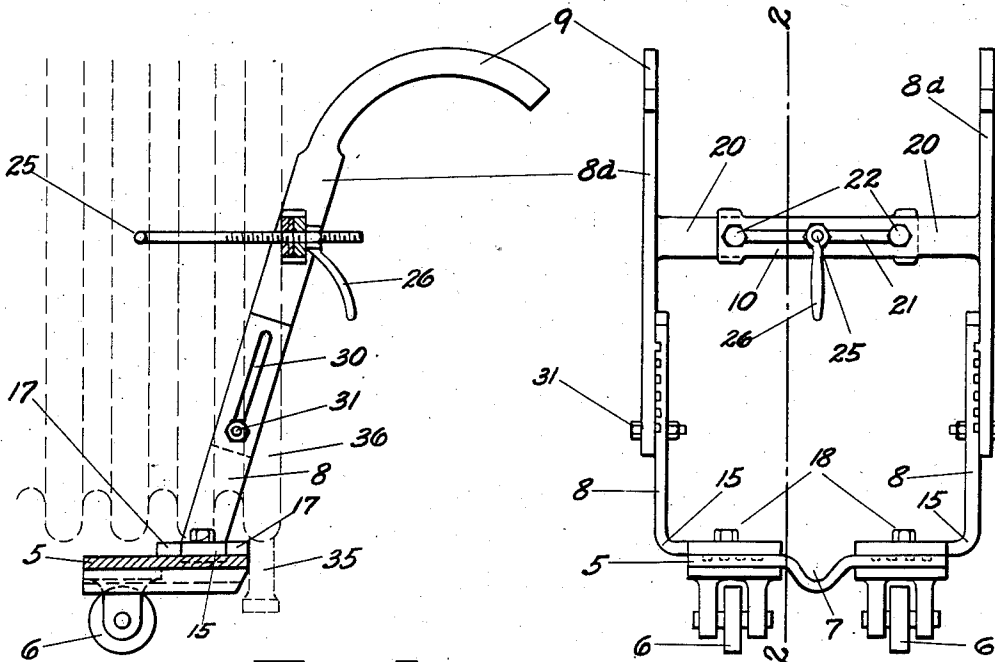


Fig. 2

Fig. 1

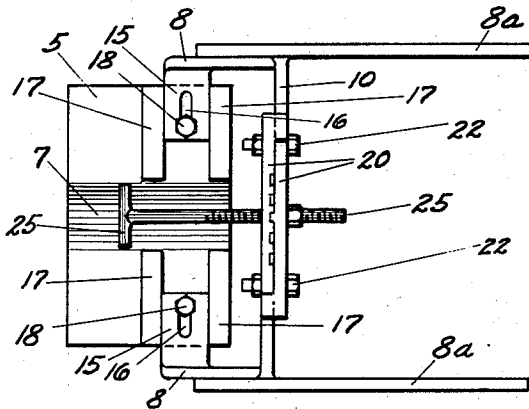


Fig. 3

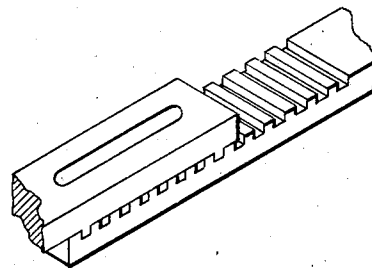


Fig. 4

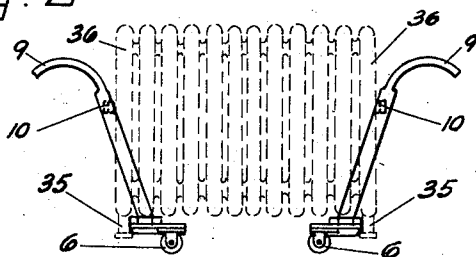


Fig. 5

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ATTORNEYS

UNITED STATES PATENT OFFICE

2,040,134

HANDLING ATTACHMENT FOR RADIATORS
AND THE LIKE

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Application February 6, 1935, Serial No. 5,238

1 Claim. (Cl. 280—34)

My invention relates to handling devices attachable to heavy awkward articles for readily moving and carrying them, and more particularly it relates to a device of this nature especially applicable in the plumbing business for moving and carrying house heating radiators or the like; my primary object being to provide a light weight, sturdy and convenient handling attachment adapted to be readily positioned relatively to the radiator to securely grip the latter without danger of slip or displacement.

With this main object in view, and with other objects which will appear later herein, my invention comprises the improvements in load handling attachments more fully described in the following specification in connection with the accompanying drawing, and the novel feature specifically set forth in the appended claims.

Fig. 1 is a front elevation of a load handling attachment embodying my invention, and shows a preferred construction particularly adapted for carrying house heating radiators.

Fig. 2 is a vertical sectional elevation taken on the line 2—2 of Fig. 1, and indicating in dotted line a house heating radiator in engaged position.

Fig. 3 is a plan view corresponding with the showing in Figs. 1 and 2.

Fig. 4 is a detail view showing the tooth engaging faces of adjustably slidable arms.

Fig. 5 is a diagrammatic view showing a manner of using my attachments by applying one at each end of a radiator.

The drawing shows my improvements adapted for a preferred specific utility for plumbers in the handling of radiators, but will disclose its adaptability and use for other similar articles.

Radiators are heavy and awkward to move and handling devices for them as heretofore devised have not been satisfactory for one cause or another.

Referring to the drawing, my handling attachment comprises a platform 5, preferably provided with a pair of rollers or casters 6, 6 as shown so that the radiator may be trundled where possible.

The platform is shown with a medial depression 7 sometimes required to accommodate a tie rod or projection extending under the bottom ends of the connected radiator sections. Rising from the platform 5, at an inclination as shown, are a pair of spaced arms 8, 8, terminating in curved ends forming handles 9, 9. A cross tie arm 10 spacedly connects the arms 8, 8, adjacent the curved handles 9, 9, as shown.

The width of radiators greatly varies, making

it desirable at times to vary the spread of the arms 8, 8, and to this end the drawing shows their ends adjacent the platform 5, angularly bent to form securing extensions 15, 15, having slots or elongated apertures 16, 16, and laterally movable in a guide way formed by ribs 17, 17, to a desired spread and held in such position by clamping bolts 18, 18.

Spaced variation of arms 8, 8, requires the cross arm 10 be also adjustable, and the drawing shows it as formed by two overlapping extensions 20, 20, slidably engaged and having slots 21, 21 with clamping bolts 22, 22. Also engaged in said slots 21, 21 is shown a T headed bolt 25 adapted to engage a radiator section through a central space in the latter, and to be drawn up by a handled nut 26 so as to prevent tilting of the device when trundled.

And to provide for convenient height of handles 9, 9 to accommodate different desired height for convenient lifting, arms 8, 8 are shown with the handled upper end portions 8a, 8a formed separately with adjusting slots 30, 30, and clamping bolts 31, 31.

I have found that a more sure connection of such adjustable arms, is best secured by making the meeting faces of their overlapping portions, toothed as shown, so that they will intermesh at any adjusted position and insure against accidental movement without severe strain on their clamping bolts. Such engagement is indicated on the platform 5 and the seating faces of extensions 15; the opposing faces of arms 8 and 8a; and the opposing faces of cross arms 20, 20; and the particular interlocking teeth are fully shown in detail view Fig. 4.

My handling attachment thus described is best employed as shown in Fig. 5 by engaging one at each end of a radiator so that convenient handles 9, 9 are provided at each end for carrying, or the radiator may be trundled on roller 6, 6.

The locking engagement of my attachment with the radiator is novel and provides for a secure grip. In placing my attachment in engagement with the radiator, one end of the latter is raised sufficiently to roll platform 5 beneath the same and just inside the legs 35 on the end section 36 against which they should contact at the same time cross arm 10 contactingly engages the outer face of said end section 36 and may be secured to the radiator by T-headed bolt 25. When thus engaged, any lifting strain on handles 9, 9, will cause platform 5 and cross arm 10 to pressingly engage opposite faces of end radiator section 36, providing a sure grip, that cannot slip or become

displaced. The angular inclination of arms 8, 8, as shown permits cross tie arm 10 to engage against the end of the radiator without tilting platform 5.

5 It will be noted that T-headed bolt 25, when lifting strain is exerted on handles 9, 9, is not strained except as it prevents tilting of the radiator, but is needed while trundling on rollers 6, 6, to prevent falling of arms 8, 8.

10 It will be further noted that my device may be employed as an ordinary truck for moving the radiator by using one only and engaging under the radiator from the side, T-head bolt 25 in such case being employed when desired to lock the
15 radiator to the truck.

From the foregoing description the nature of my improvements and the manner of its employment will be readily understood. The laterally and lengthwise adjustments of the arms and cross
20 arm may not be required in all cases and changes

in the specific structure may of course be made without departing from my invention as defined in the following claim.

What I claim is:

A handling device for radiators comprising a 5 pair of lengthwise adjustable lifting arms spaced to receive the end of a radiator, a connecting bottom platform for said arms adapted to engage beneath a radiator against the inner face of the supporting legs of an end section of the latter and 10 having trundling rollers intermediate its width and forward of the arm connections thereto, a cross-tie arm intermediate the length of said lifting arms adapted to engage against the outer face of said radiator section, and a T-headed tie bolt 15 secured in said cross-tie arm and adapted to engage a radiator section midway of the width of the latter, whereby said platform is held in horizontal position beneath the radiator.

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