

June 13, 1939.

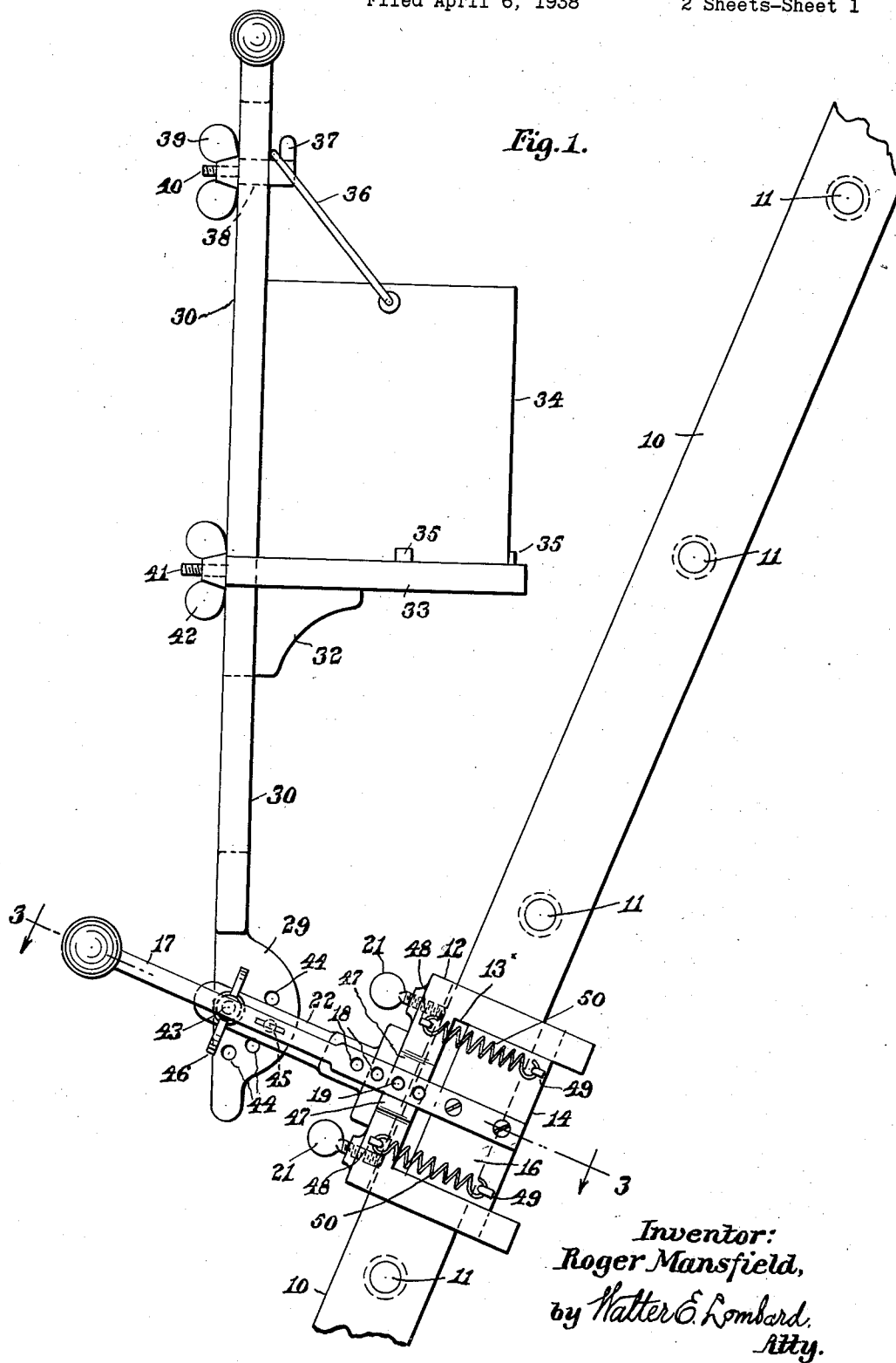
R. MANSFIELD

2,162,022

ADJUSTABLE LADDER ATTACHMENT FOR SUPPORTING PAINT PAILS

Filed April 6, 1938

2 Sheets-Sheet 1



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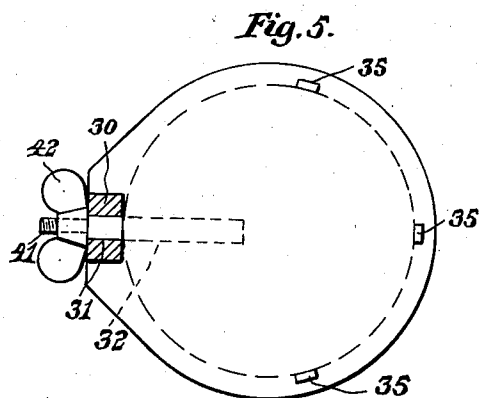
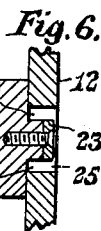
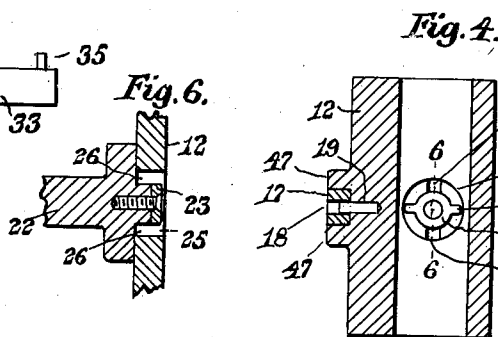
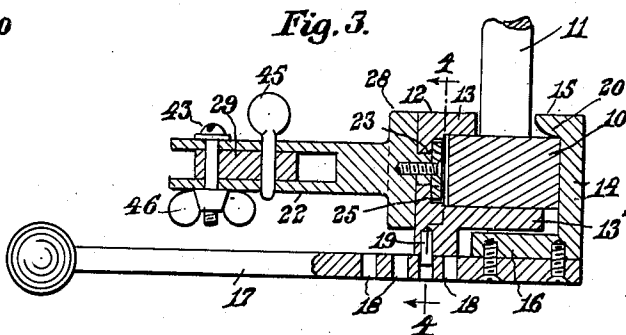
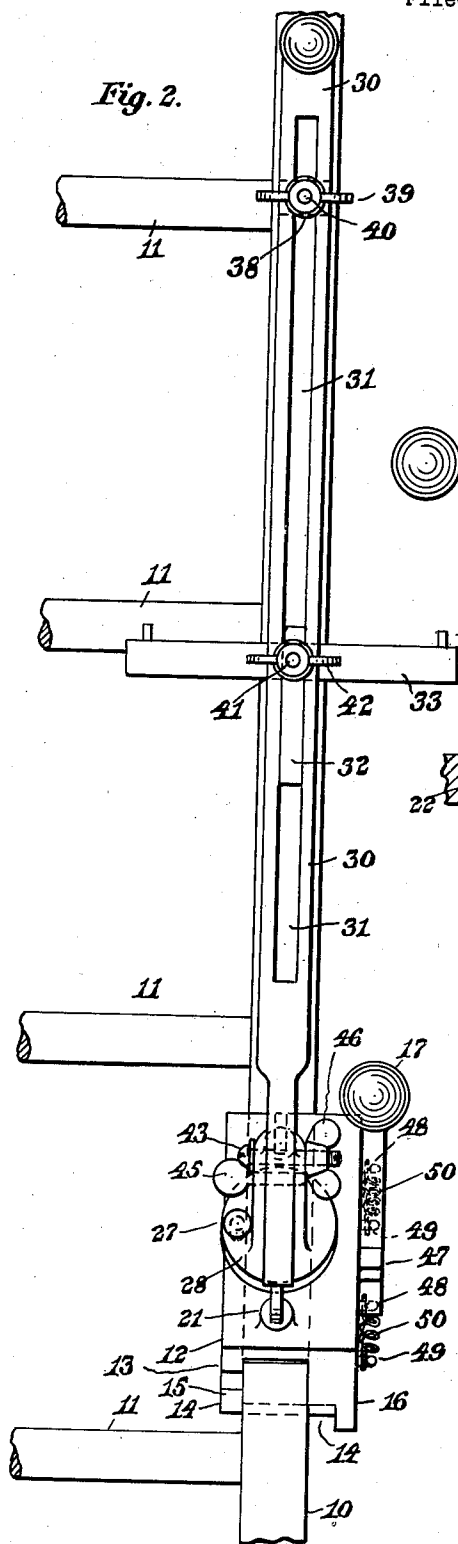
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ADJUSTABLE LADDER ATTACHMENT FOR SUPPORTING PAINT PAILS

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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ADJUSTABLE LADDER ATTACHMENT FOR
SUPPORTING PAINT PAILS

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Application April 6, 1938, Serial No. 200,307

6 Claims. (Cl. 248—210)

This invention relates to adjustable attachments to ladders for supporting paint pails and consists of a device which may be clamped in any desired position to a side bar of a ladder, said device being provided with a support for the paint pail which always may be retained horizontal regardless of the angle in which the ladder may be positioned.

The invention further consists in making the attachment demountable so that it will occupy a minimum amount of space when being carried to and from the point where the painting is to be done.

The invention further consists in making the attachment adjustable so that it may be used conveniently by either a right-handed or a left-handed painter.

The invention further consists in providing means whereby the pail bracket may be adjusted to the most convenient height for the painter.

The object of the invention is the production of an inexpensive paint pail support which may be quickly attached to and adjusted lengthwise of a ladder and under all conditions retain the pail bracket in a horizontal position.

These objects are attained by the mechanism shown in the accompanying drawings.

For the purpose of illustrating the invention, one preferred form thereof is illustrated in the drawings, this form having been found to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized, and the invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described except as required by the scope of the appended claims.

Of the drawings

Figure 1 represents a side elevation of an attachment for ladders adapted to be adjustable lengthwise thereof and support a paint pail in horizontal position.

Figure 2 represents a front elevation of the same.

Figure 3 represents a transverse section of same on line 3,3 on Fig. 1.

Figure 4 represents a section on line 4,4 of Fig. 3.

Figure 5 represents a transverse section of the vertical member and showing in plan the bracket for supporting the paint pail, and

Figure 6 represents a section on line 6,6 of Fig. 4.

Similar characters indicate like parts throughout the several figures of the drawings.

In the drawings, 10 is one side bar of an ordinary ladder having rungs 11 extending to the other side bar of said ladder.

Slidably mounted on the side bar 10 is a U-shaped member 12, the flanges 13, 13x of which straddle the bar 10.

Coacting with the member 12 is another U-shaped member 14 having flanges 15 and 16, the flange 15 being at one side of the bar 12 while the flange 16 extends along the outer side of the flange 13x of member 12.

The member 14 is movable toward the member 12 so that these members 12 and 14 are adjustable relatively to each other in order to accommodate this device 12, 14 to various thicknesses of side bars 10.

Secured to the flange 16 is a handle 17 having a plurality of aligned holes 18 extending there-through, either of which is adapted to coact with a protruding pin 19 extending from a side face of the member 12.

The inner face of flange 15 is curved as shown at 20 so that the member 14 may be tilted to disconnect the pin 19 from a hole 18 to permit adjustment of the members 12, 14 relatively to each other and then allow the pin 19 to be inserted into another hole 18 when the proper adjustment has been made.

The member 12 has threaded thereto two clamping bolts 21 which are adapted to impinge upon the upper face of bar 10 and draw the member 14 tightly against the underside of said bar so that the device 12, 14 is securely locked to the bar 10 until further adjustment of said device 12, 14 lengthwise of bar is required.

Extending upwardly from the member 12 is a forked member 22 which may be removed from said member 12 when desired.

The lower end of the forked member 22 has secured thereto a disk 23 having oppositely disposed arms 24.

The disk 23 is disposed in a cylindrical chamber 25 within the upper wall of member 12 and from this chamber two oppositely disposed slots 26 extend through the wall of member 12.

When the forked member 22 is secured to member 12 the arms 24 bear against the wall of the chamber and the forked member 22 is prevented from turning about its axis by a pin 27 extending through a hole in the flange 28 and into a socket in the member 12.

When it is desired to remove the forked member 22 from member 12 the pin 27 is removed and the

forked member 22 is moved about its axis until the arms 24 are opposite the slots 26, at which time said arms 24 may be moved through the slots 26, thus separating the members 12 and 22.

5 In the end of the forked member 22 is mounted one end 29 of a vertical arm 30 having a long slot 31 extending lengthwise thereof.

Into the slot 31 extends a bracket 32 carrying a support 33 for a paint pail 34, said support 33 10 having a plurality of upward projections 35 to prevent the displacement of said pail.

The bail 36 of the pail 34 is disposed over the hook 37 projecting from a slidable member 38 in the slot 31 and adapted to be locked in adjusted position by means of a clamp nut 39 on a threaded stud 40 extending from said member 38. 15

In the same manner the supporting bracket 32 has a threaded stud 41 extending therefrom on which is a clamp nut 42 by which the bracket 20 32 may be securely locked to the arm 30.

By these clamping means the support 33 and hook 37 may be adjusted relatively to each other to make allowance for pails of different sizes.

In the same manner the support 33 and hook 25 37 may both be adjusted lengthwise of the arm 30 to bring the pail 34 into the most convenient position for the painter to reach while painting.

Regardless of the angle of the ladder when in use it is desirable to have the arm 30 vertical and 30 the support 33 horizontal.

In order to accomplish this the lower end 29 of arm 30 is flattened and pivoted on a stud 43 extending therethrough and through the forked member 22.

35 This flattened end 29 has a plurality of holes 44 extending therethrough to receive a locking pin 45 extending through the forked member 22, thereby providing a means whereby the angle of the arm 30 relatively to forked member 22 may 40 be varied as desired.

When the arm 30 is properly positioned it is locked by means of the nut 46 threaded to the headed stud 43.

45 The handle 17 is disposed between two ears 47 projecting from one side of the member 12.

The member 12 is provided with two hooks 48 projecting from one side thereof and the member 14 is provided with two hooks 49 and between these hooks 48,49 are springs 50 which tend to 50 move the member 14 toward the member 12 and into contact with the bar 10 when the device 12, 14 is mounted on said bar.

The office of the springs 50 is to bring the member 14 against the under side of the bar 10 55 but the actual clamping of the device 12,14 to the bar 10 is accomplished by means of the bolts 21.

By means of this device the support for the paint pail may be adjusted to any desired position on the vertical arm 30 into such position that 60 the pail may be readily reached by the painter during the painting operation.

It is obvious that means is provided whereby

the paint pail cannot slide outwardly off its support 33.

Likewise, means is provided whereby the paint pail cannot be tilted owing to the bail 36 being disposed upon the hook 37. 5

The entire mechanism may be removed from the right hand bar 10 of the ladder and secured to the other bar of the ladder and then the paint pail will be in convenient position for a left handed painter. 10

It is believed that the operation and many advantages of the invention will be understood without further description.

Having thus described my invention, I claim:

1. An attachment for ladders for use by painters and similar workmen comprising a device slidable lengthwise of a side bar of a ladder and adapted to be clamped thereto, an elongated arm pivotally mounted on said device and extending upwardly therefrom, means for locking said arm in vertical position regardless of the inclination of the latter, a support for a paint pail adjustable lengthwise of said arm and to various heights above said clamping device, and means for locking said support to said arm in adjusted position. 15 25

2. An attachment for ladders as set forth in claim 1 in which the clamping device consists of two coacting U-shaped members each straddling the bar of the ladder and springs for moving said members toward each other, one of said members being provided with clamp screws adapted to impinge upon said bar. 30

3. An attachment for ladders as set forth in claim 1 in which said arm is provided above said pail support with an independently adjustable hook member extending outwardly to receive the bail of the paint pail. 35

4. An attachment for ladders as set forth in claim 1 in which the clamping device consists of two coacting U-shaped members each straddling the bar of the ladder and adjustable toward each other, one of said members being provided with clamp screws adapted to impinge upon said bar and having a pin projecting from one side thereof and the other member being provided with a handle having a row of holes therein either of which is adapted to receive said pin whereby said members may be locked together. 40 45

5. An attachment for ladders as set forth in claim 1 in which the arm is adapted to be locked in various positions to a forked member extending upwardly and outwardly from the clamping device, said forked member being provided with means whereby it may be disconnected from said clamping device. 50 55

6. An attachment for ladders as set forth in claim 1 in which the clamping device consists of two coacting U-shaped members each straddling the bar of the ladder and said members being adjustable toward each other, one of said members being provided with clamp screws adapted to impinge upon said bar. 60

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