No. 666,099. Patented Jan. 15, 1901.

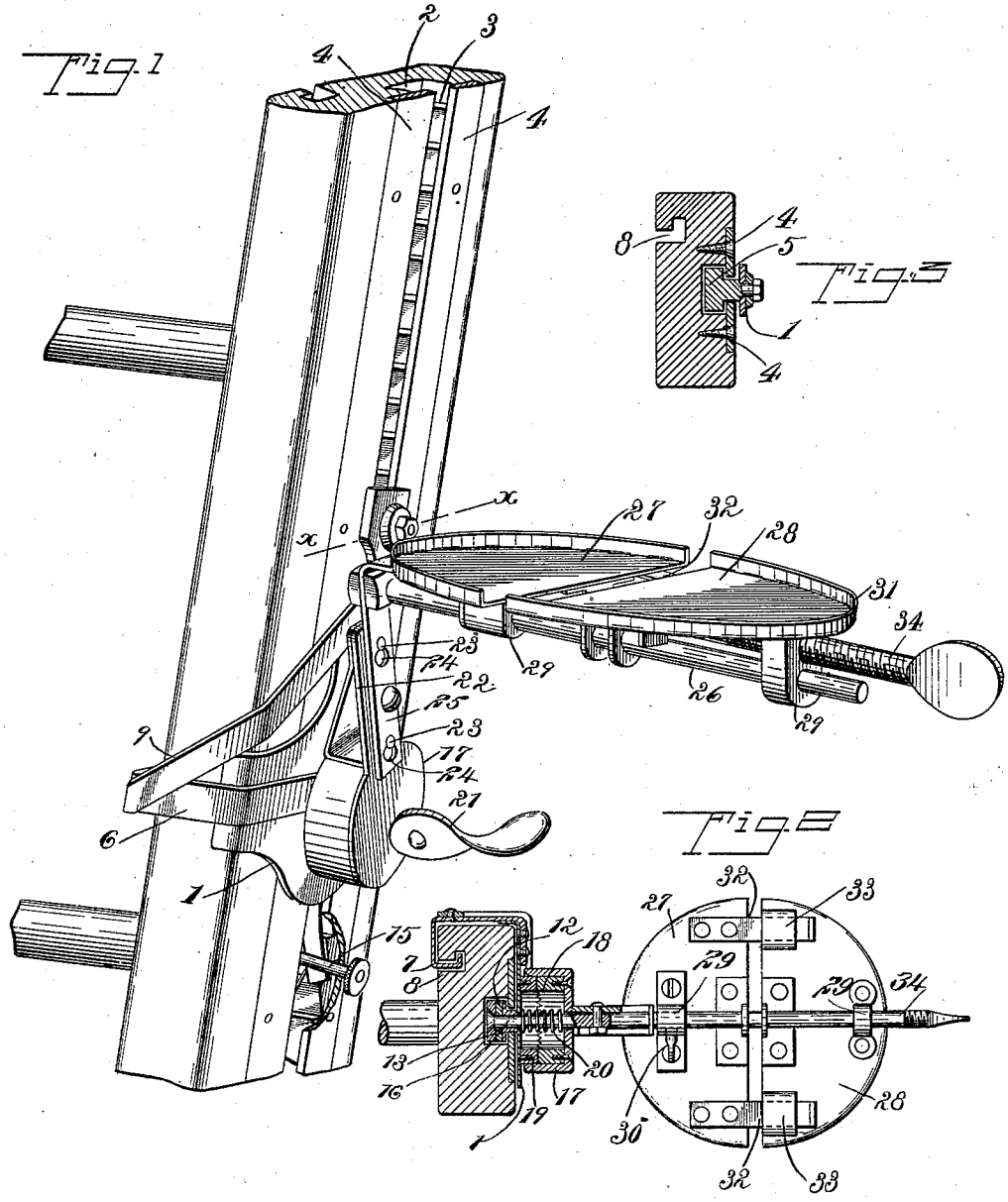
H. KEPLER.

CAN HOLDING ATTACHMENT FOR LADDERS.

(Application filed July 21, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1



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Fig. 4

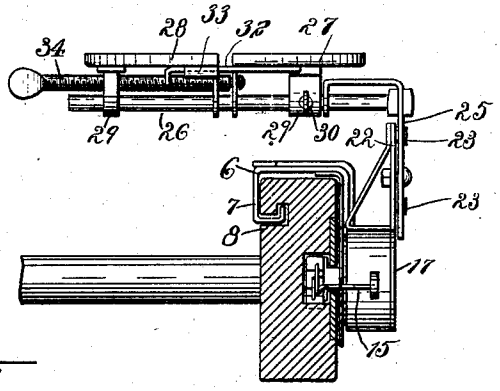


Fig. 5

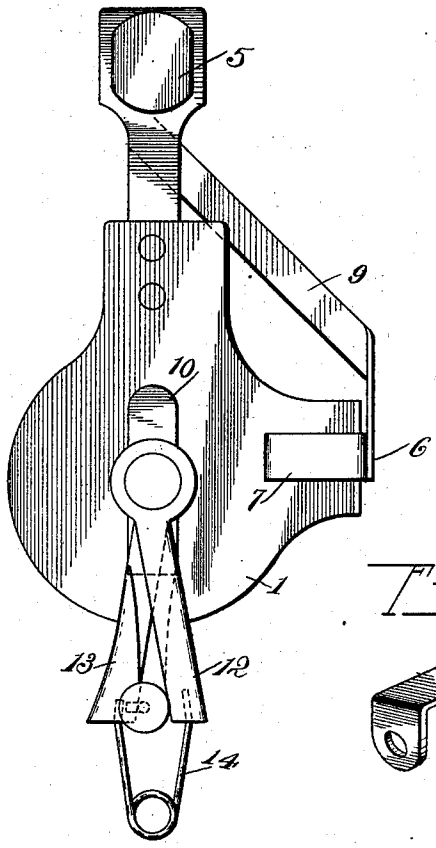


Fig. 6

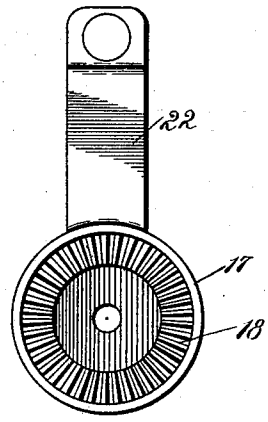
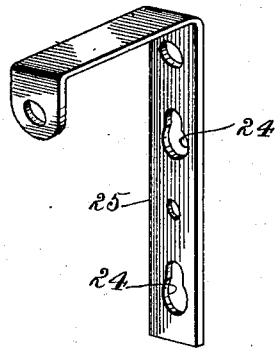


Fig. 7



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UNITED STATES PATENT OFFICE.

HARVEY KEPLER, OF DAWSON, NORTH DAKOTA.

CAN-HOLDING ATTACHMENT FOR LADDERS.

SPECIFICATION forming part of Letters Patent No. 666,099, dated January 15, 1901.

Application filed July 21, 1900. Serial No. 24,445. (No model.)

To all whom it may concern:

Be it known that I, HARVEY KEPLER, a citizen of the United States, and a resident of Dawson, in the county of Kidder and State of North Dakota, have invented a new and Improved Can-Holding Attachment for Ladders, of which the following is a full, clear, and exact description.

This invention relates to improvements in attachments for ladders to hold paint-cans; and the object is to provide a simple device of this character that may be moved along the rail of the ladder as desired and held in any desired position relative thereto and so arranged that the attachment may be adjusted to hold the can level at any angle at which the latter may stand, either while painting the side of a building or the roof, and, further, to make the attachment adjustable to different sizes of cans.

I will describe a can-holding attachment for ladders embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a ladder attachment embodying my invention, showing the same as connected to a ladder. Fig. 2 is a partial section and partial bottom plan view thereof. Fig. 3 is a section on the line *x x* of Fig. 1. Fig. 4 is a side view showing the arrangement of the device when the ladder is placed on a roof. Fig. 5 is a back view of the supporting-plate. Fig. 6 shows a clutch mechanism employed, and Fig. 7 is a perspective view of a bracket employed.

Referring to the drawings, 1 designates a supporting-plate adapted to be moved up and down a side rail of a ladder. The said rail of the ladder is provided with a longitudinal channel 2 at its outer side, one wall of which is provided with rack-teeth 3, and guide-plates 4 are attached to the ladder-rail, the space between the adjacent edges of which is less than the width of the channel 2, as clearly indicated in the drawings. On the upper end of the plate 1 is a block 5, movable in the channel 2 and having shoulder portions to engage against the inner sides of the strips 4, thus forming a guide for the plate and preventing any possible swinging motion thereof. Also attached to the plate is an arm 6, which extends across the front surface of the side rail of the ladder, thence along the inner surface thereof, where it terminates in a hook portion 7, engaging in an undercut channel 8, formed in the inner side of said side rail of the ladder. The arm 6 may be further connected to the plate 1 by means of a brace 9, connected at its lower end to said arm and at its upper end to the plate, as clearly shown in Figs. 1 and 5.

On the lower portion of the plate 1, at its inner side, is a block 10, which engages between the strips 4, and on this block 10 are pivoted two jaws 12 and 13, which are pressed yieldingly apart by means of a spring 14, the respective members of said spring being engaged with the jaws. One member (here shown as the member 12 of the jaws) will engage closely against the smooth wall-surface of the channel 2, while the opposite jaw member is designed to engage with the ratchet-teeth 3, so as to hold the device as adjusted on the side rail or bar of the ladder. When it is desired to lower the supporting-frame, the jaw 13 may be moved out of engagement with the teeth by pushing laterally on a rod 15, which is connected to said jaw 13 and extends outward between the plates 4, as shown in Fig. 1. When the supporting-plate is moved upward, however, it is evident that the jaws will yield so that the jaw 13 may slide over the teeth.

The pivot 16, to which the jaws 12 and 13 are attached, is extended outward through the plate 1 and loosely through an opening in a barrel 17, and arranged within this barrel is a clutch-section 18, adapted to engage with a clutch-section 19, attached to said plate 1. These clutch-sections are of ring-like form and each is provided with teeth, the teeth of one section being adapted to engage with the teeth of the other section. A spring 20, engaging at one end with the barrel 17 and at the other end with the plate 1, serves to normally force the clutch members apart, so that the barrel 17 may be rotated relatively to the clutch member 19, and when adjusted the clutch members are to be moved and held in engagement, as here shown, by means of a

cam-lever 21, pivoted to the projected end of the pivot 16 and adapted to engage with the outer side of the barrel 17.

Attached to the barrel 17 and extended radially therefrom is a plate 22, provided with headed lugs 23, adapted to be received in key-hole-openings 24, formed in a platform-supporting bracket 25. The lower portions of these openings 24 are sufficiently large to pass over the heads of the lugs; but the upper portions of said openings are of less width than the diameter of the heads, so that when the bracket is moved downward the lugs will be rigidly attached to said plate 22.

Attached to the bracket 25 and extended at right angles thereto is a rod 26, upon which a can-supporting platform is adjustable. This can-supporting platform consists of two semi-cylindrical sections 27 and 28, each having a lug 29, through which said rod passes. Therefore these sections may be adjusted axially of the rod and may be held as adjusted by means of a thumb-screw 30, engaging in a tapped hole in the lug 29, attached to the platform-section 27. Each section 27 and 28 is provided with a peripheral flange 31 for clamping tightly against the lower portion of a can, and the section 28 is made adjustable toward and from the section 27, so as to adapt the platform to different sizes of cans. As here shown, plates 32 are attached to the section 27 and pass through loops 33, attached to the section 28. The section 28 is moved toward and from the section 27 by means of a screw-rod 34, engaging in a tapped hole in the lug 29, attached to said section 28 and engaging at its end with the lug 29, depending from the section 27 of the can-supporting platform.

The operation of the device is quite evident from the drawings. It may be stated, however, that it may be readily removed from the ladder by drawing it outward from the upper end or, in fact, it may be drawn out at the lower end after releasing the jaw 13 from the teeth 3. By loosening the cam-lever 21 the barrel 17 may be rotated to any desired degree to level the supporting-platform.

In Fig. 1 the supporting-platform is shown as extended outward from the ladder; but if desired it may be removed from the arm 22 and reversed, as indicated in Fig. 4, so as to extend over the ladder. This may be found convenient when the ladder is placed upon a roof. This arrangement is shown in Fig. 4.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination with a ladder having a channel formed in one of its side rails and teeth on a wall of said channel, of a can-holding attachment, comprising a plate, a guide-block on one end of said plate for engaging in the channel formed in the rail of the ladder, a spring-pressed jaw on the lower portion of said plate for engaging with any one of the teeth in said channel, an arm extended from said plate and having a hook portion for engaging in a channel formed longitudinally in the inner side of the side rail of the ladder, and a can-holding platform removably connected to the plate, substantially as specified.

2. The combination with a ladder having a channel in one of its side rails and teeth on one of the walls thereof, of a can-holding attachment, comprising a plate, a guide-block on the upper end of said plate for entering the said channel, a spring-pressed holding-jaw on the lower portion of said plate for engaging with any one of the teeth in said channel, a clutch-section on said plate, a barrel surrounding said clutch-section, a clutch-section secured within the barrel and adapted for engagement with the first-named clutch-section, a plate extended from said barrel, and a can-supporting platform adapted for removable connection with said last-named plate, whereby the platform may be extended outward from the ladder or inward of the same, substantially as specified.

3. A can-holding attachment for ladders, comprising a supporting-plate, consisting of two sections each having an upwardly-turned edge, a screw-threaded adjusting-rod for said plate, whereby one section may be moved relatively to the other section, plates attached to one section, and loops on the other section in which said plates are movable, and means for attaching the platform to the ladder, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HARVEY KEPLER.

Witnesses:
JAN BIRGEL,
F. H. SPOTTS.