C. C. NELLIS.

LADDER SHELF.

APPLICATION FILED MAY 16, 1913.

1,087,603. Patented Feb. 17, 1914.

Fig. 4.

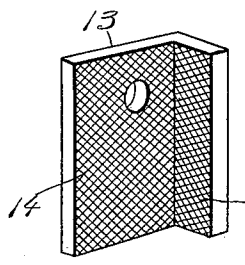


Fig. 1.

Fig. 2.

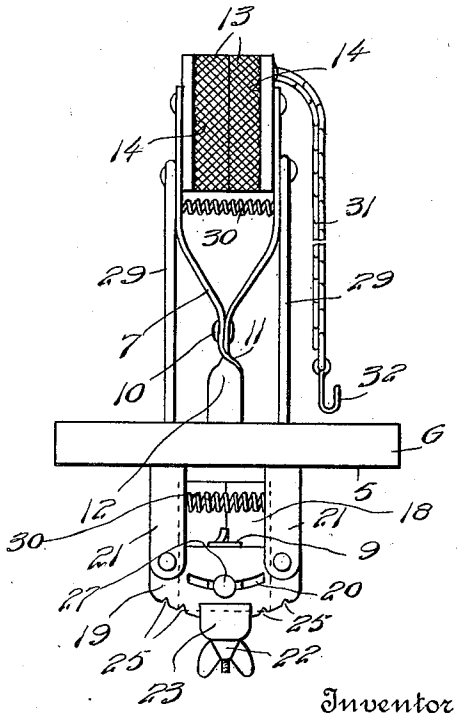
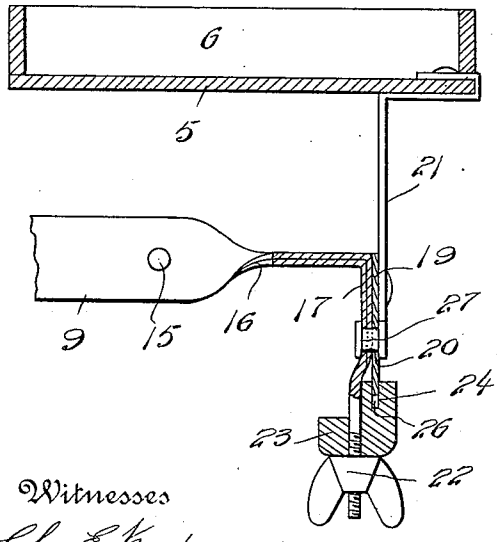


Fig. 3.



Witnesses

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LADDER-SHELF.

1,087,603. Specification of Letters Patent. Patented Feb. 17, 1914.

Application filed May 16, 1913. Serial No. 768,162.

To all whom it may concern:

Be it known that I, CLARENCE C. NELLIS, a citizen of the United States, residing at Cold Brook, in the county of Herkimer, State of New York, have invented certain new and useful Improvements in Ladder-Shelves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to ladder shelves, and it more particularly relates to an improved combined attachable and adjustable shelf and supporting bracket.

An object of the invention is to provide an improved shelf bracket which may be quickly and easily attached to and detached from an ordinary ladder, and which is provided with a shelf for supporting tools, paint and brushes, etc., in convenient position for access by a mechanic or painter.

Another object of the invention is to provide a device of this character in which the shelf is adjustably mounted on the bracket, so that it may be easily leveled.

Another object is to provide a device of this character which is simple of construction, strong, durable, comparatively inexpensive and thoroughly efficient.

Other objects and advantages may be recited hereinafter and in the claims.

In the accompanying drawings, which supplement this specification: Figure 1 is a perspective view, illustrating a portion of a ladder having my improved combination bracket and shelf attached thereon. Fig. 2 is a front elevation view. Fig. 3 is an enlarged detail view partly in section of the shelf and its supporting means, and Fig. 4 is a detail perspective view of one of the corrugated clamping jaws.

Referring to these drawings, in which similar reference characters correspond with similar parts, throughout the several views: The shelf 5 is preferably provided with upstanding flanges or walls 6. This shelf is supported by the bracket members 7, 8 and 9. The bracket member 7 is formed by uniting two similar metal straps by a rivet 10 and turning the contiguous sections thereof, at 11, through an angle of approximately ninety degrees, and then extending the end portions 12 downward, so that they may be pivotally connected with the rear flange 6. The upper and rear ends of the bracket members or straps are separated a sufficient distance to receive the L-shaped keeper members 13 therebetween, and are rigidly secured to said keeper members respectively. Each of these keeper members is provided with corrugations 14, for normally preventing them from slipping on the ladder.

The lower bracket member 9 is somewhat similar in construction to the bracket member 7, being formed of two metal straps which are connected by a rivet 15, being twisted at 16 and extended downward at 17. Between the separated rear ends of this bracket member is secured a pair of L-shaped keeper members 18 which are also corrugated, and are rigidly connected to the respective strap elements.

The bracket member 8 comprises a plate 19 provided with an arcuate slot 20, and rigidly connected to this plate and extending upward therefrom is a pair of standards or supports 21, having their upper ends rigidly engaged with the outer portion of the platform 5.

The lower end of the element 17 is screw-threaded and fitted with a nut 22, and slidably mounted upon this element 17 is a clamping element 23. This clamping element is provided with a slot 24 into which the lower arcuate edge of the plate 19 is seated; this lower arcuate edge being provided with notches 25, while the member 23 is provided with a tooth or detent 26 which is adapted to be alternatively fitted within the notches 25.

The element 17 is provided with a headed stud 27 which extends through the slot 20; so that when the tooth 26 is disengaged from the notches 25, the stud may be moved through the slot 20 to any desired position of adjustment, while the platform 5 rotates upon the pivot 28, which connects it with the element 12. By this arrangement, it is obvious that the platform or table 5 may be quickly and easily leveled.

The rear end portions of the bracket members are secured together by means of struts or supporting rods 29, having their upper ends secured to the upper bracket member adjacent to the rear end thereof, and depending therefrom, and having their lower ends connected to the bracket member 9. Retractile springs 30 are connected between the respective upper and lower ends of the rods 29, and coact therewith and with the rear ends of the bracket members for hold-

ing the keeper members in closed position, that is, keeping the opposite upper keeper members in contact with each other or in contact with the sides of the ladder rail, and keeping the opposite lower elements 18 similarly in engagement with said ladder rail.

When the combined bracket and shelf are to be used for supporting an especially heavy load, or when the bracket is to be supported in an exact position in which the keeper members 13 do not rest upon one of the ladder rungs, the chains 31 may be employed, by extending it over or wrapping it around one of the rungs above the bracket and then engaging its hook 32 with one of the lower links thereof.

When it is desired to remove the bracket from the ladder, it is only necessary to separate the rear ends of the bifurcated bracket member 7, so that the ladder rail may be passed between the inwardly extending flanges of the keeper elements, and then separating the lower keeper members sufficiently to relieve the engagement of the ribs or corrugations 14 thereof, and the same operation is necessary for applying the bracket to a ladder, or adjusting its position on the ladder.

From the foregoing, it will be seen that I have provided a device of this character which is fully capable of attaining the foregoing objects, in a thoroughly practical and efficient manner.

I do not limit my invention to the exact details of construction, combination and arrangement of parts, as herewith illustrated and described, but my invention may only be limited by a reasonable interpretation of the claims.

I claim:

1. A combination shelf and supporting bracket consisting of a shelf having a bracket member rigidly connected thereto and provided with an arcuate slot, a second bracket member provided with an element extending through the arcuate slot and adapted for adjustment therein, the second said bracket member extending rearwardly beyond and below the platform and adapted to engage with a ladder, a third bracket member pivotally connected to the platform at a point concentric with the arcuate slot and extending rearwardly and upwardly from the platform and adapted to engage with a ladder, and supporting means connecting the rear portions of the second said bracket member and the third said bracket member.

2. A ladder attachment consisting of a shelf, a bracket member secured to the shelf and having an arcuate element provided with notches, a second bracket member having its forward end in contiguity with the first said bracket member and being extended downward and provided with a screw-threaded shank, a keeper member loosely mounted on the shank and provided with a slot into which the arcuate element extends, said keeper element being provided with a detent adapted to be fitted alternatively into the different notches of the segment, said second bracket member being provided with means for engagement with the ladder, and means whereby the rear portion of the platform is pivotally supported concentrically with said arcuate element.

3. A self-supporting bracket comprising a bifurcated bracket member having an L-shaped keeper member secured to each furcation thereof, each L-shaped keeper member being provided with corrugations adapted to engage with the sides of a ladder rail, and means coacting with the furcations for drawing the L-shaped keeper members toward one another.

In testimony whereof, I affix my signature, in the presence of two witnesses.

CLARENCE C. NELLIS.

Witnesses:
FLORENCE MCMAHON,
JAMES P. NELLIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."