S. PLASCLASCOVITIE.

SHELF FOR LADDERS.

APPLICATION FILED AUG. 30, 1918.

1,352,914. Patented Sept. 14, 1920.

Fig. 1.

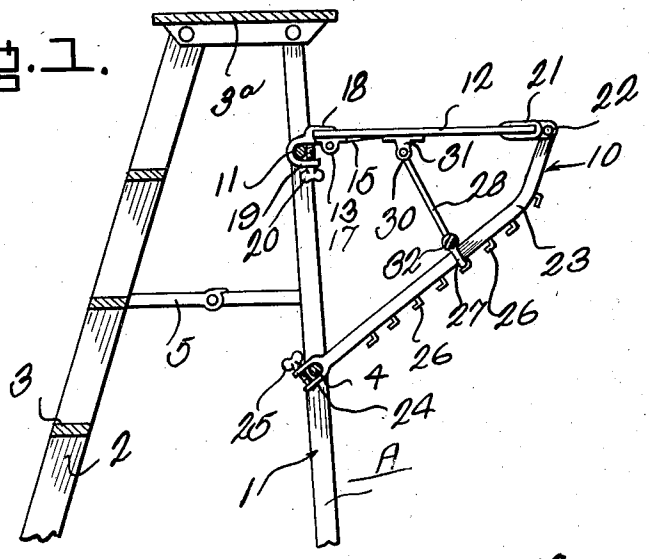



Fig. 2.

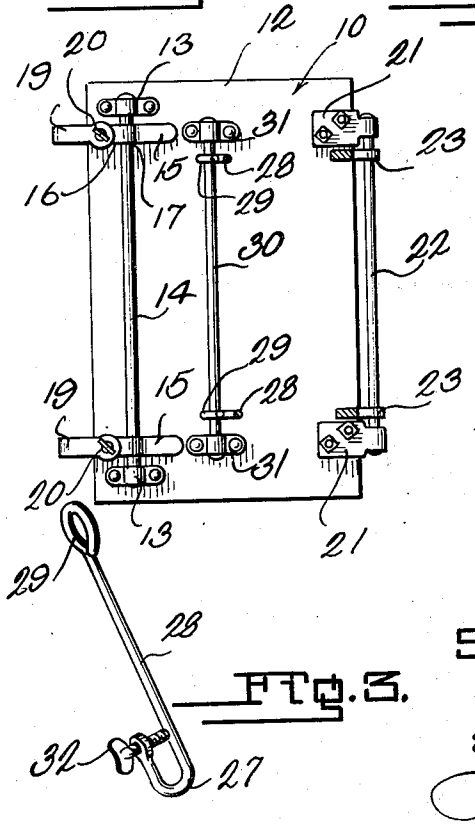



Fig. 4.

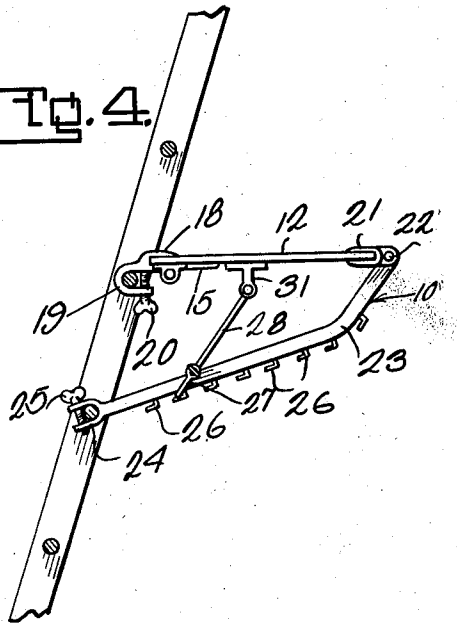



Fig. 3.

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## SHELF FOR LADDERS.

1,352,914. Specification of Letters Patent. Patented Sept. 14, 1920.

Application filed August 30, 1918. Serial No. 252,075.

*To all whom it may concern:*

Be it known that I, SIDNEY PLASCLASCOVITIE, a citizen of the United States, and a resident of Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Shelves for Ladders, of which the following is a specification.

This invention relates to a shelf or support adapted for attachment to ladders.

An object of this invention is to provide a supporting shelf for attachment to ladders, which is relatively light in weight, and includes suitable attaching means, whereby it may be quickly and conveniently attached to either a stepladder or an ordinary painter's ladder for supporting any desired article.

More specifically, the invention comprehends the provision of a supporting shelf as specified, including a supporting plate having a plurality of rods attached to the under surface of the same to which rods are connected suitable attaching brackets for engagement with a brace or rung of the ladder structure, struts which are adjustably connected to another of said rods for movement longitudinally on the rod, and bracing members to prevent buckling of the struts under the weight of an article supported by the supporting plate, all of which members, namely the attaching brackets, struts and braces are mounted upon the plate carried rods for longitudinal movement thereon to adapt the device for attachment to ladders of various widths.

Other objects of the invention will appear in the following detailed description, taken in connection with the accompanying drawing, forming a part of this specification, and in which drawing:

Figure 1 is a sectional view through a stepladder showing the improved supporting shelf attached thereto.

Fig. 2 is a bottom plan of the supporting shelf structure having parts thereof broken away.

Fig. 3 is a detail perspective view of one of the bracing members employed in the shelf structure, and

Fig. 4 is a view showing the improved shelf attached to an ordinary painter's ladder.

Referring more particularly to the drawing wherein like characters indicate like or corresponding parts, the letter A indicates an ordinary stepladder, comprising the supporting legs or brace members 1, and stiles 2 which carry the steps 3. The bracing legs 1 are braced by the ordinary bracing member 4, while the stiles 2 are braced in adjusted positions from the supporting legs by the ordinary type of hinged brace members 5.

The improved supporting shelf, which is generally indicated by the numeral 10, is connected to the ladder structure 1, by means of the brace bar 4 and an auxiliary brace bar 11 carried by the legs 1 a short distance below the top step $3^a$ of the ladder.

The improved supporting shelf 10 comprises the supporting plate 12 which has a pair of bearing members 13 attached to its under surface near its inner edges. A rod 14 is carried by these bearing members 13 and it has attaching brackets 15 adjustably mounted thereon for movement longitudinally of the rod and toward or from each other. The attaching brackets 15 comprise the relatively long lower sections 16 which are provided with the bearings 17 which engage the rod 14, and the relatively short upper members 18 which are parallel to the lower relatively long members 16 being spaced therefrom sufficient distance to fit snugly over the edge of the plate 12. The brackets 15 have clamping members 19 formed thereon which curve downwardly beneath the lower relatively long members 16 and engage about the brace rod 11, being held against movement off the brace rod by suitable thumb nuts 20.

A pair of brackets 21 are carried at the outer edge of the plate 12, and they support a rod 22. The rod 22 is positioned beyond the outer edge of the plate 12 and it has a pair of brace members 23 connected thereto. The brace members 23 are mounted upon the rod 22 for longitudinal movement therealong for adjusting the distances between these brace members, to accommodate them to ladders of various widths. The brace members 23 extend downwardly under the plate 12 and have their lower ends bifurcated as shown at 24 for fitting over the brace 4. Thumb nuts 25 extend through the arms of the bifurcated lower ends of the brace members or struts 23 to prevent these bifurcated ends from slipping off the bracing rod 4. The struts 23 have a plurality

of hooks 26 carried thereby and extending downwardly from their under edges at spaced distances longitudinally along the struts. These hook members are adapted for engagement, one of them upon each strut, with the lower hook ends 27 of braces 28. These braces 28 have eyes 29 formed upon their upper ends which eyes are mounted about a rod 30 which is carried by suitable brackets 31 that are attached to the under surface of the supporting plate 12. Thumb screws 32 are carried by the flat terminals of the hooks 27 and engage across the upper edges of the struts 23 to prevent the hooks from moving off the struts while the brace members 28 are prevented from movement longitudinally along the struts by the hook members 26 with which they engage. The brace members 28 are provided to prevent buckling of the struts 23 and to assist in the maintaining of a rigid supporting structure for the shelf 12 to permit it to support the desired article without danger of slipping or breaking. The plurality of hooks 26 is provided, to permit the proper positioning of the bracing rods 28, when attaching the shelf to various types of ladders or ladders at various angles, so as to allow the supporting plate 12 to remain in a horizontal position at all times.

Changes in details may be made without departing from the spirit of this invention, but

I claim:

1. In a shelf attachment for ladders, the combination, of a supporting plate, a rod carried by said supporting plate parallel to the inner edge thereof, and attaching brackets adjustably mounted upon said rod for lateral movement with respect to the plate and for movement toward or from each other.

2. In a shelf attachment for ladders, the combination, of a supporting plate, a rod carried by said plate parallel to the inner edge thereof, attaching brackets adjustably carried by said rod for lateral movement with respect to the plate and for movement toward or from each other, a rod carried at and parallel to the outer edge of said plate, and a plurality of struts pivotally connected to said rod for lateral movement with respect to the plate and for movement toward and from each other.

3. In a shelf attachment for ladders, the combination, of a supporting plate, a rod carried beneath said plate, supporting brackets adjustably carried by said rod for movement toward or from each other for connecting the plate to a ladder, a rod carried at the outer edge of said plate, a plurality of struts pivotally connected to said rod for movement toward or from each other, the free ends of said struts adapted for connection to said ladder, a third rod carried by said supporting plate, bracing arms mounted upon said third rod for movement longitudinally therealong, said bracing rods having their free ends hook-shaped for engagement over said struts to brace the struts.

4. In a shelf attachment for ladders, the combination, of a supporting plate, a rod attached to said plate near one end thereof, supporting brackets mounted upon said rod for adjustment toward or from each other, said attaching brackets comprising spaced parallel plate engaging members, and downturned hooks carried by said bracket for engagement with a ladder.

5. In a shelf attachment for ladders, the combination, of a supporting plate, a rod carried beneath said plate, supporting brackets adjustably carried by said rod for movement toward or from each other for connecting the plate to a ladder, a rod carried at the outer edge of said plate, a plurality of struts pivotally connected to said rod for movement toward or from each other, the free end of said struts adapted for connection to said ladder, a series of downturned hooks arranged upon each strut, a third rod carried by said supporting plate, bracing arms mounted upon said third rod for movement longitudinally therealong, said bracing rods having their free ends formed for engagement over said struts and engaging a selected hook of said series of hooks to prevent longitudinal movement upon said struts to brace the supporting plate.

SIDNEY PLASCLASCOVITIE