June 11, 1963 L. NAGY 3,093,209

ALL PURPOSE PLATFORM LADDER

Filed May 7, 1962

Fig. 1

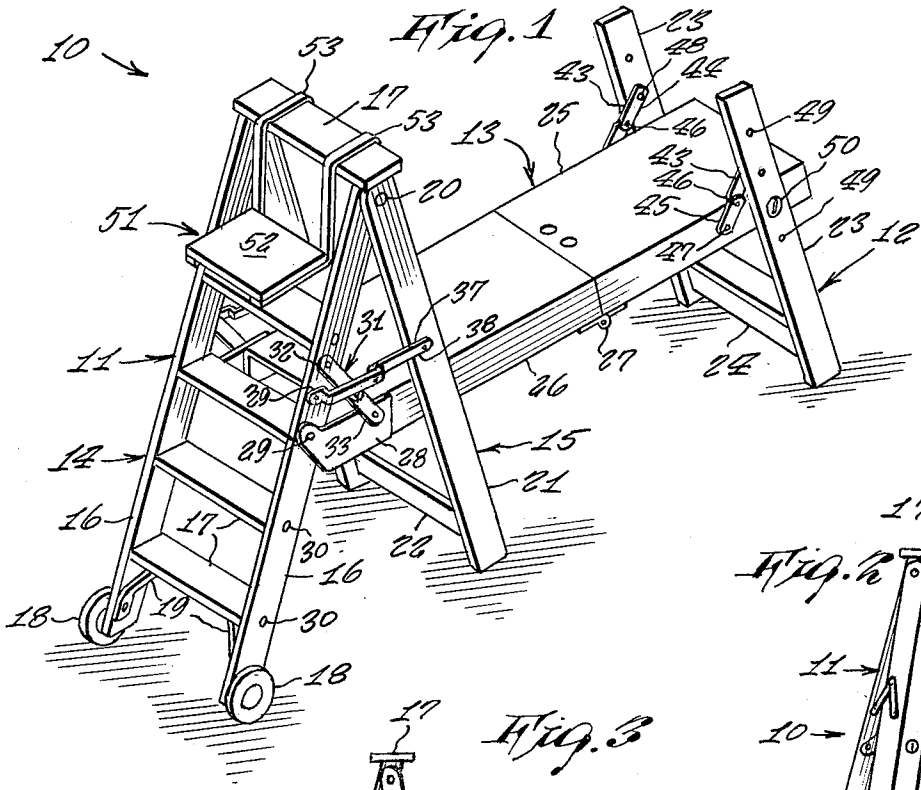


Fig. 2

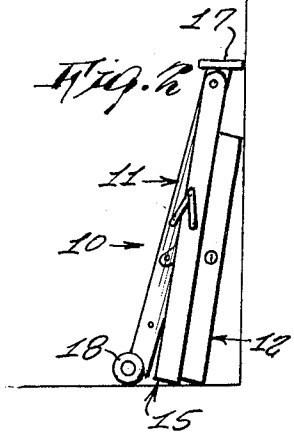


Fig. 3

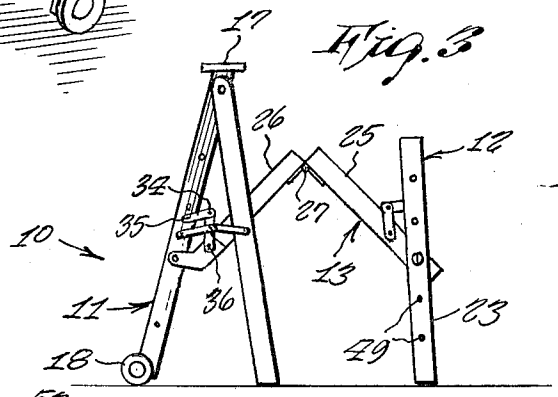
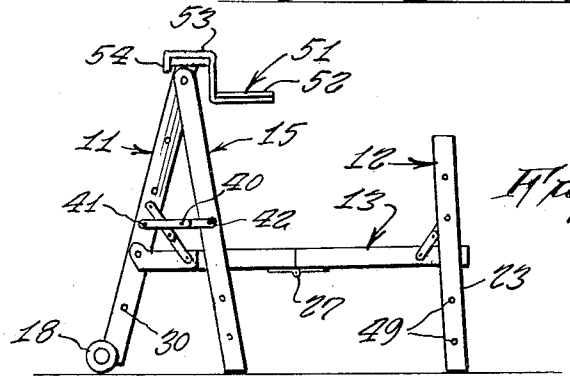


Fig. 4



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ALL PURPOSE PLATFORM LADDER

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This invention relates generally to step ladders and more specifically to a combined stepladder and scaffold.

One object of the present invention is to provide an all-purpose platform stepladder which may be readily and easily moved from one location to another without the requirement of taking it apart for such operation. Thus the device will save considerable time which would be normally expended in disassembling the device and then reassembling it again.

Another object of the present invention is to provide an all-purpose platform stepladder having wheel means so that the device may be easily rolled across a carpet or drop cloth without becoming shagged therein and which can be moved across a floor without scratching the same.

Still another object of the present invention is to provide an all-purpose platform stepladder which can be readily moved from one room to another through an average doorway.

Still another object of the present invention is to provide an all-purpose stepladder wherein the platform is readily adjustable in height.

Still another object is to provide an all-purpose platform stepladder wherein the ladder may be used with the platform in a folded condition or wherein the platform may be readily removed from the ladder.

Other objects of the invention are to provide all purpose combination step ladder bearing the above objects in mind which is of simple construction, has a minimum number of parts, is inexpensive to manufacture and efficient in operation.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in conjunction with the accompanying drawing, in which:

FIGURE 1 is a perspective view of the present invention shown in fully extended position.

FIGURE 2 is a side elevation thereof shown in fully folded position.

FIGURE 3 is a side elevation view showing the device in partly collapsed position.

FIGURE 4 is a side elevation view showing the device in fully extended position.

Referring now to the drawing in detail the numeral 10 represents an all-purpose stepladder wherein there is a stepladder element 11, a prop element 12, and a platform element 13 which is supported at one of its ends by the stepladder element and at its other end by the prop element. The stepladder element is comprised of a pair of frames 14 and 15 which are pivotally attached at their one ends to each other. The frame 14 forms a ladder having parallel spaced apart uprights 16 and a plurality of cross pieces 17 therebetween which forms steps. Adjacent to the lower end of the uprights there are a pair of wheels 18 for the purpose of rollably moving the present device across a floor. Brackets 19 may be provided for firmly supporting the cross pieces to the uprights. Frame 15 serves as a prop for the ladder and is pivotally attached at its upper end to the upper end of the ladder by means of pins 20. The prop is comprised of a pair of parallel spaced apart rails 21 connected together by means of a cross piece 22. The prop 12 is likewise comprised of a pair of parallel spaced apart rails 23 having a cross piece 24 therebetween. The platform 13 is comprised of a pair of sections 25 and

26 which are pivotally attached to each other by means of a hinge 27. The section 26 is provided at one end with a pair of metal plates 28 which are rigidly affixed thereto and each of which is pivotally attached to a pin 29 which is selectively engaged in one of the openings 30 along the length of the upright. A folding brace 31 is comprised of a pair of links 32 and 33 which are pivotally attached to each other by means of pin 43 and the fold brace is attached at its one end by means of pin 35 to the ladder upright and by means of pin 36 to the metal plate of the platform section. A fold brace 37 comprised of links 38 and 39 pivotally attached together by means of a pin 40 is attached at one of its ends by means of pin 41 to the ladder and at its other end by means of pin 42 to the prop 15. A fold brace 43 comprised of a pair of links 44 and 45 pivotally attached together by means of pin 46 is attached by means of pin 47 to the platform section 25 and by means of pin 48 selectively to one of the openings 49 in the rails 23 of the prop 12. Each of the above cited pins may be substituted by bolts or the like in the construction as preferred by the manufacturer. The section 25 of the platform is also pivotally connected by means of bolt 50 or the like to the uprights of the prop 12. The bolt being likewise selectively placed in one of the openings 49. A paint can holder 51 is comprised of a platform 52 and a pair of brackets 53 having hook portions 54 which may be clamped or hooked over the cross piece 17 as shown in FIGURE 1 of the drawing. The paint can holder may be readily reversed in position as shown in the alternate arrangement illustrated in FIGURE 4. It is understood that spacers not shown in the drawing may be provided between the prop and platform in order to allow the fold brace to fold therebetween. It is understood this device may be made in any size desirable for adaptability for various specific purposes. One suggested size for the platform would be 18 inches in width by 5 feet in length. This dimension is not to be construed as a limitation but only as a suggested size.

Thus it has been shown a device which may be readily adaptable for use as a stepladder and scaffold which is readily transportable without requiring disassembly and which is fully adjustable in height.

While various changes may be made in the construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claims.

What I claim as new and desire to protect by Letters Patent of the United States is:

1. A supporting device of the character described, comprising in combination first and second frames pivoted together and each including a pair of side rails and cross members securing the rails together in spaced parallel relationship, a folding brace for holding the frames apart in an upright rigid triangular structure, a platform shorter than either frame and narrower than one of the frames, the platform including a pair of offset securing means at one end, means pivoting the offset securing means to the first frame so that the platform can be disposed parallel to said first frame and within the width of one of the frames and within the length of both frames, said platform being adapted to be swung into horizontal position when said structure is upright, a second platform shorter than either frame and pivoted at a line below the upper side of one end thereof to a corresponding line below the upper side of the first platform, the platforms including abutment means above their pivot lines so that both platforms when horizontal form a rigid support for vertical loads, a support wider than said second platform pivoted to the outside of the other end of the second plat-

form and a folding brace forming a rigid triangular structure with said second platform and said support whereby the entire device includes a foldable horizontal support held by two rigid vertical supports secured together by a rigid triangular structure and the device can be folded into a series of contiguous parallel members in which the first platform is within the thickness of one of the frames and the second platform is within the thickness of the support.

2. A supporting device of the character described, comprising in combination first and second frames pivoted together and each including a pair of side rails and cross members securing the rails together in spaced parallel relationship, a folding brace for holding the frames apart in an upright rigid triangular structure, a platform shorter than either frame and narrower than one of the frames, the platform including a pair of offset securing means at one end, means pivoting the offset securing means to the first frame so that the platform can be disposed parallel to said first frame and within the width of one frame and within the length of both frames, said platform being adapted to be swung into horizontal position when said structure is upright, a second platform shorter than either frame and pivoted at a line below the upper side of one end thereof to a corresponding line below the upper side of the first platform, the platforms including abutment means above their pivot lines so that both platforms when horizontal form a rigid support for vertical loads, a support pivoted to the other end of the second platform and a folding brace forming a rigid triangular structure with said second platform and said support whereby the entire device includes a foldable horizontal support held by two rigid vertical supports secured together by a rigid triangular structure.

3. A supporting device of the character described, comprising in combination a pair of frames pivoted together and each including a pair of side rails and cross members securing the rails together in spaced parallel relationship, a folding brace for holding the frames apart in an upright rigid triangular structure, a platform pivoted to one frame, said platform being shorter than either frame and narrower than one of the frames so that the platform can be positioned within the length of both frames and within the width of said one frame, said platform being adapted to be swung into horizontal position when said structure is upright, a second platform shorter than either frame and pivoted at a line below the upper side of one end thereof to a corresponding line below the upper side of the first platform, the platforms including abutment means above their pivot lines so that both platforms when horizontal form a rigid support for vertical loads, a support wider than said second platform pivoted to the outside of the other end of the second platform, and a folding brace forming a second rigid triangular structure with said second platform and said support whereby the entire device includes a pivotally foldable horizontal support held by two rigid vertical structures secured together by a rigid triangular structure, and the device can be folded into a series of contiguous parallel members.

4. A supporting device of the character described, comprising in combination a pair of frames pivoted together and each including a pair of side rails and cross members securing the rails together in spaced parallel relationship, a folding brace for holding the frames apart in an upright rigid triangular structure, a platform pivoted to one frame, said platform being shorter than either frame and narrower than one of the frames so that the platform can be positioned within the length of both frames and within the width of said one frame, said platform being adapted to be swung into horizontal position when said structure is upright, a second platform shorter than either frame and pivoted at a line below the upper side of one end thereof to a corresponding line below the upper side of the first platform, the platforms including abutment means above their pivot lines so that both platforms when horizontal form a rigid support for vertical loads, a support pivoted to the other end of the second platform, and a folding brace forming a second rigid triangular structure with said second platform and said support whereby the entire device includes a pivotally foldable horizontal support held by two rigid vertical structures secured together by a rigid triangular structure.

References Cited in the file of this patent

UNITED STATES PATENTS

316,643	Niehaus	Apr. 28, 1885
582,617	Bowman	May 18, 1897
1,474,250	Folliard	Nov. 13, 1923
2,911,133	Ruggieri	Nov. 3, 1959