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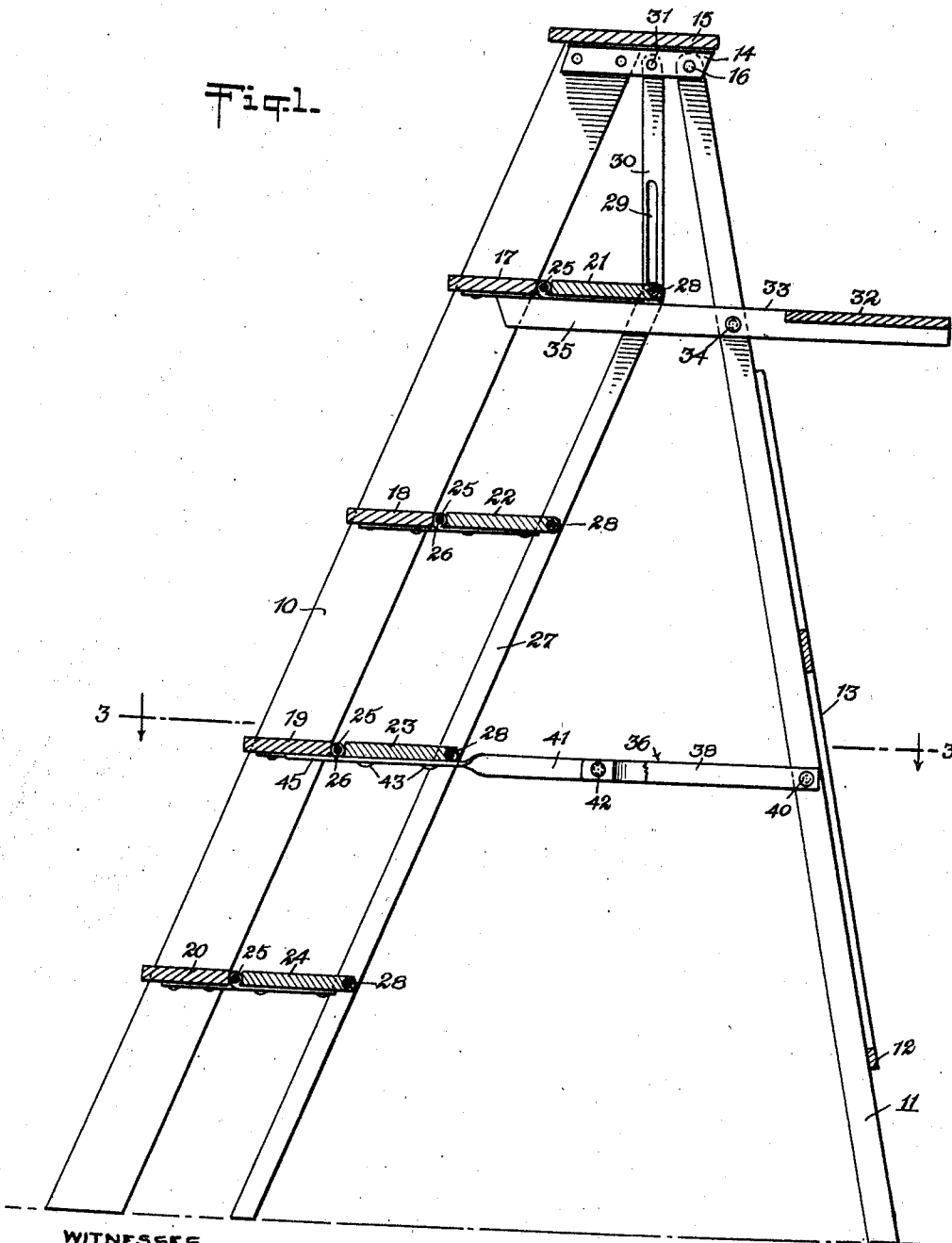
2,280,691

STEPLADDER

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2 Sheets-Sheet 1

Fig. 1.



WITNESSES

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STEPLADDER

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6 Claims. (Cl. 228—37)

This invention relates to ladders and more particularly to the type of ladder commonly known as a step-ladder.

An object of the invention is to provide a sturdy, collapsible ladder which will offer more security to the user than those ladders now in use.

A further object is to provide in a folding ladder a broader step than is now available.

A still further object is to provide a ladder having a broad step which will fold into a space not larger than that used by ladders with the conventional step.

Other objects and purposes of my invention will become apparent as the description proceeds.

In the accompanying drawings—

Fig. 1 is a side view in section of a ladder embodying my invention, said ladder being in the open position;

Fig. 2 is a side view in section of the same ladder in folded position; and

Fig. 3 is a cross-section of the ladder, taken on the line 3—3 of Fig. 1.

I provide a ladder having the conventional front leg members 10 and rear leg members 11, said rear leg members being provided with the usual braces 12 and 13. The leg members 10 and 11 are joined at the top by conventional means, such as the bracket 14 and the platform 15, the rear members 11 being pivoted at 16 to the bracket 14. The members 10 are provided with the usual steps 17, 18, 19 and 20. Hinged to the rear of the steps 17, 18, 19 and 20 are supplemental steps 21, 22, 23 and 24. While I have shown a hinge 23 having a continuous pintle 26, any type of hinge or a series of hinges may be used. The steps 21, 22, 23 and 24 are pivoted at their inner ends to a supporting member 27 by means of rods 28. The rod 28 which supports the step 21 engages a slot 29 in the depending arm 30 which is pivotally supported at 31 to the bracket 14. A conventional folding platform 32, mounted on arms 33, may be pivoted at 34 to the rear leg members 11 and is supported by the ends 35 of the arms 33 engaging the under side of the steps 17 and 21. A brace 36 having forked members 37 and 38 pivoted to the rear leg members 11 at 39 and 40 and having a single member 41 pivoted to forked members 42 and fastened to the supplemental step 23 at 43, is also provided. The member 41 may have an extension 45 extending under the step member 19 to further brace it and for purposes which will be hereafter described.

It will be seen when the ladder is folded that the rod 28 will slide upwardly in the slot 29 and

the supplemental steps 21, 22, 23 and 24 will fold on their hinges 25 inside the leg members and the supporting member 27 so that the ladder when folded takes up little more room than a ladder without the supplemental steps. In unfolding the ladder, the end 45 of the bracket member 41 may be used to force the rear members 11 outwardly and the steps downwardly, or the ladder may be unfolded in the conventional manner.

It will be seen with my improved ladder that a much larger step is provided so that the user may place his entire foot on the step and avoid the fatigue which is so often suffered where the step provides only sufficient space for the ball of the foot. The ladder will be particularly advantageous to painters and carpenters who are required to stand on ladders of this type for extended periods of time.

I claim:

1. The combination with a folding step-ladder having leg members and stationary steps supported by said leg members, of supplemental steps hinged to the rear of said stationary steps and adapted to fold upwardly when said ladder is folded.

2. The combination with a folding step-ladder having leg members and stationary steps supported by said leg members, of supplemental steps hinged at one side to said stationary steps, and pivotal supporting means at the other side of said stationary steps.

3. The combination with a step-ladder having leg members pivotally joined at one end and stationary steps supported by one of said leg members, of supplemental steps, said supplemental steps being hinged at one edge to said stationary steps, an arm pivotally supported by said leg members, a slot in said arm, a supporting member mounted for slidable engagement with said slot, and means on said supporting member pivotally engaging the other edge of each of said supplemental steps.

4. The combination with a folding step-ladder having leg members and stationary steps supported by said leg members, of supplemental steps, said supplemental steps being hinged at one edge to said stationary steps, a ladder brace fixed to one of said supplemental steps and pivotally connected to the other leg member, a member hinged to and connecting each of said supplemental steps, an arm depending from said ladder, a slot in said arm, and connecting means on said member engaging said slot whereby said member may slide upwardly in said slot.

5. The combination with a folding step-ladder having front and rear leg members and stationary steps supported by said front leg members, of supplemental steps, said supplemental steps being hinged at one of their edges to said stationary steps, a ladder brace fixed to one of said supplemental steps and pivotally connected to the rear leg members, a member hinged to and connecting each of said supplemental steps, an arm depending from the top of said ladder, a slot in said arm, and connecting means on said member engaging said slot whereby said member may slide upwardly in said slot when said ladder is folded causing said supplemental steps to fold

and whereby said member will support said supplemental steps when said ladder is opened.

6. The combination with a folding step-ladder having front leg members fixed to a platform, rear leg members pivoted to said platform and stationary steps supported by said front leg members, of supplemental steps, said supplemental steps being hinged at one of their edges to said stationary steps, and means hinged to the other edge of each of said supplemental steps and depending from said platform said supplemental steps.

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