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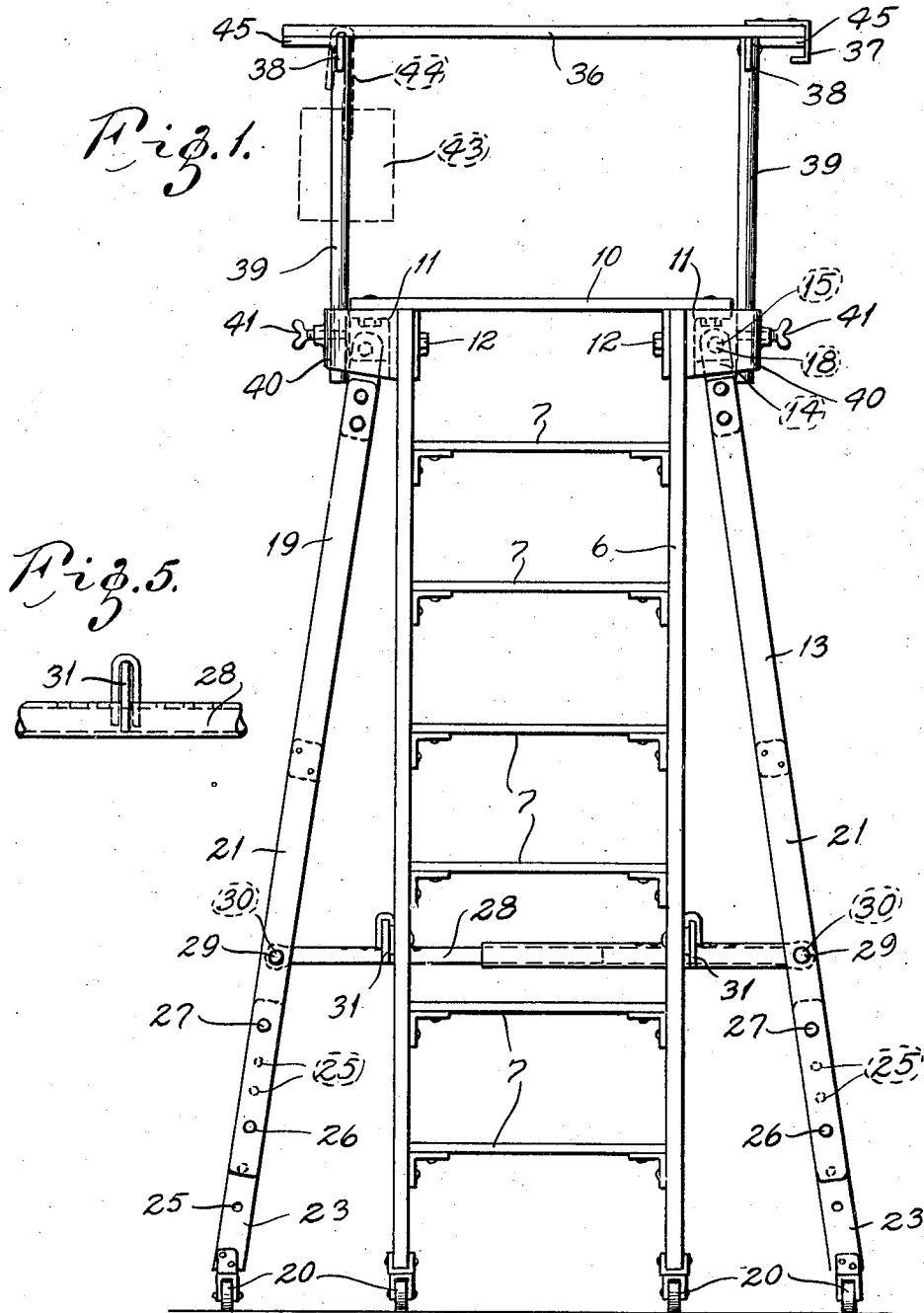
P. J. BODE

1,735,992

LADDER

Filed Jan. 26, 1928

2 Sheets-Sheet 1



INVENTOR:
PETER J. BODE

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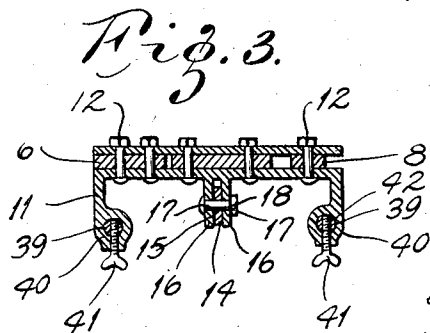
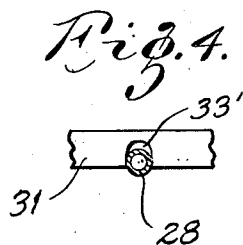
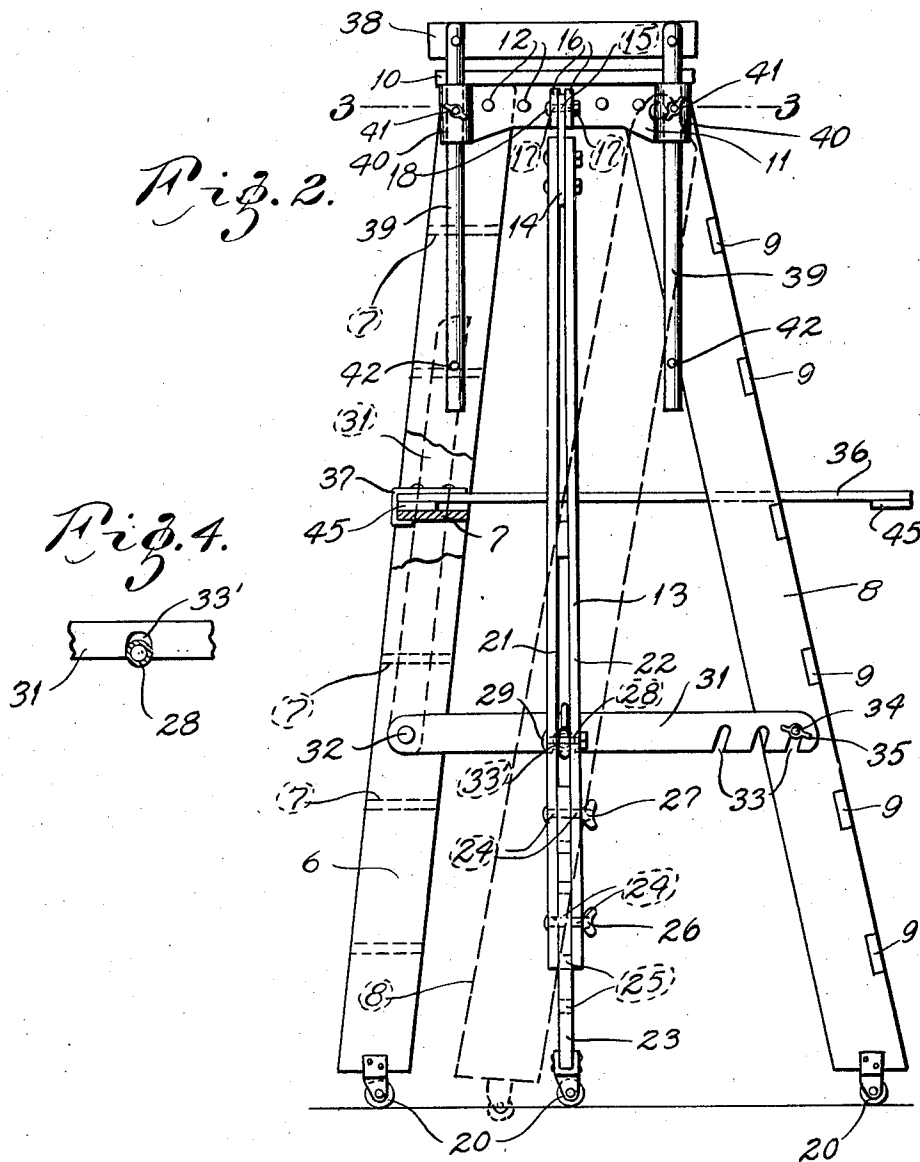
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UNITED STATES PATENT OFFICE

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LADDER

Application filed January 26, 1928. Serial No. 249,511.

The object of my device is to make a ladder which embodies a great many safety elements. In the use of the conventional ladder the stability of the person on the ladder is too uncertain, particularly where such person is required to perform different tasks such as painting or repairing, plumbing, or washing windows or cleaning generally. A further object of my device is to devise a ladder which positively and firmly supports the platform on which the operator stands, one that is adjustable in height, one that may be easily moved from one position to another, and one which provides means for supporting a bucket or other tools in a convenient position relative the operator. A further object is to make a ladder which is simple in construction, that is, made of parts that lend themselves readily to multiple production and which may be easily assembled.

With these and other objects in view, my invention has relation to certain novel features of construction and arrangement of parts as will be hereinafter more fully described, pointed out in the claim, and illustrated in the drawing in which,

Fig. 1 is a front elevation of my device.

Fig. 2 is a side elevation of my device.

Fig. 3 is a cross sectional plan view taken on the line 3—3 of Fig. 2.

Fig. 4 is a fragmental section of an arm used in my construction showing its selective attachment to a telescopic rod used in my construction.

Fig. 5 is an enlarged fragmental elevation of a portion of the telescopic rod used in my device together with means of selectively securing it to the arms used in my device.

Numeral 6 designates a ladder of the conventional type having the treads 7. Numeral 8 designates a second ladder of the conventional type having the treads 9. Numeral 10 designates a platform to which the ladders 6 and 8 are secured by means of the angle irons 11, which are secured to the lower side of the platform 10 and the bolts 12, passing through the upper end of the rails of the ladders and through holes in the angle irons 11. The structure thus far described illustrates what may be termed a double ladder. Ac-

cess to the platform 10 may be obtained by means of either of the ladders. Numeral 13 designates an auxiliary leg which is pivotally secured to the lower lateral side of the platform 10 in a central position. The securing means consists of a metallic element 14 secured to the top of the auxiliary leg 13 and having the perforation 15 formed therein. This metallic element 14 is positioned between two elements 16 having holes 17 formed therein. The bolt 18 passes through the perforation 15 of the metallic element 14, as well as through the holes 17 in the elements 16. A similar auxiliary foot 19 is secured in the same manner to the opposite side of the platform 10. Casters 20 are secured at the bottom of the auxiliary legs 13 and 19 as well as to the feet of the ladders 6 and 8. In order to make the auxiliary legs 13 and 19 extensible so that the height of these feet may be varied, each foot is made as follows, that is to say, each leg is made of two rails 21 and 22, which are rotatively secured at the top as previously indicated. Numeral 23 designates an independent element to which the caster 20 is secured. The independent element 23 is of such size and shape, preferably rectangular in section, as to permit its being slid longitudinally between the ends of the rails 21 and 22. The rails 21 and 22 are perforated at regular intervals as indicated by numeral 24 and the independent element 23 is similarly perforated as indicated at 25. The holes in the rails 21 and 22 and in the independent element 23 are similarly spaced. Numeral 26 designates a pin or bolt as does numeral 27 which passes through two opposite perforations in the rails 21 and 22 and through a perforation in the independent element 23. By means of the pins and bolts 26 and 27 the independent element 23 may be placed in a selective position relative the rails 21 and 22. It is obvious that the lateral stability of the ladder is made positive by means of the auxiliary legs 13 and 19. In order to selectively limit the rotation or oscillation of the auxiliary legs 13 and 19 relative the platform 10, the telescopic rod 28 is provided which is rotatively secured at one end to the auxiliary leg 19 and rotatively secured at its other end

to the auxiliary leg 13. The securing means is of the conventional type, namely, a pin 29 passes through opposite perforations in the rails 21 and 22 and through a perforation 30 at the end of the telescopic rod. In order to selectively limit the length of the telescopic rod 28, the rod is perforated in both the male and female portions permitting the insertion of a pin or bolt through one of the perforations in the male and female portion. It will be seen that when the length of the telescopic rod 28 is fixed that the relative lateral position of the auxiliary legs 13 and 19 is established. In order to selectively establish the position of the ladders 6 and 8, the arms 31 are provided. There are two of such arms, each arm being rotatively secured to one of the ladders such as 6 in the same horizontal plane as the telescopic rod 28. This rotating securing means consists of a pin or bolt 32 passing through one rail of the ladder 6 and through a perforation in the arm 31. The opposite end of the arm 31 is notched as shown at 33. Numeral 34 designates a bolt having the fly nut 35. The arm 31 may be selectively placed in position by engaging a notch 33 over the bolt 34. A notch 33' formed in the arm 31 also engages the telescopic rod 28 when in the position of Fig. 2.

In order to provide a stand or support between the ladders 6 and 8, the support 36 is provided which is of a width slightly less than the distance between the rails of the ladders 6 and 8. At one end of the support 36 is formed the hook 37 by means of which the support 36 can be hooked on to any tread of the ladder 6, causing the support 36 to lie in a horizontal plane and be supported by the tread of the ladder 6 and likewise by the corresponding tread of the ladder 8. The support 36 is of such length that the end opposite the hook 37 will project considerably beyond the ladder 8. This is for the purpose of offering a support for a bucket or other tool. In order to offer a manual support for the operator working on the platform 10, two rails 38 are provided as shown in Figs. 1 and 2. These rails when in position are supported in a horizontal plane about hand height above the platform 10. The supporting is accomplished by means of the supports 39 near the ends of which are rotatively secured the rails 38. In order to permit the raising and lowering of the rails 38 and hence the supports 39, the supports 39 are secured in sliding engagement in the hollow cylinders 40 formed on the platform 10. In order to secure the supports 39 in a definite selective position, bolts or pins 41 are provided which pass through holes in the hollow cylinders 40 and through holes in the supports 39. Such a hole is indicated in Fig. 2 by the numeral 42. It will be seen that the operator having the rails 38 as supports is

enabled to hold with one hand on said rail and use his other hand for the operation that he is performing. The rails may also be used as supports for an instrument such as a bucket 43, which has a hook handle 44 which may be selectively hooked over the top of the rails 38. If it is desirable for the operator to reach higher than is possible in standing on the platform 10, the height of the ladder may be increased by supporting the support 36 on top of the rails 38 as indicated in Fig. 1. In order to prevent the support 36 from sliding off laterally, the cleats 45 are secured to the support 36.

It will be seen that when my ladder is not in use it may be folded considerably so as to occupy as small a space as possible. The arms 31 may be disengaged from the bolts 34 and the ladders 8 and 6 be brought to a parallel position. The telescopic rod 28 may be telescoped until the auxiliary feet 13 and 19 are brought to a state of parallelism. The supports 39 may be slid downwardly into the position shown in Fig. 2.

What I claim and mean to secure by Letters Patent is—

In combination with a platform, ladders pivotally secured thereto, means for selectively holding said ladders in selective spaced relationship, auxiliary legs pivotally secured to said platform, a telescopic rod securing said auxiliary legs together.

In testimony whereof I affix my signature.
PETER J. BODE.

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