

July 14, 1931.

J. M. PARRY

1,814,960

LADDER

Filed Sept. 5, 1929

FIG. 1.

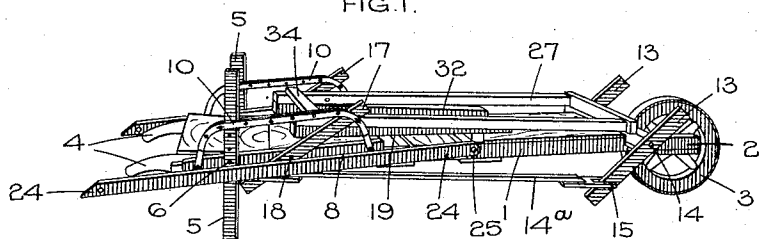


FIG. 4.

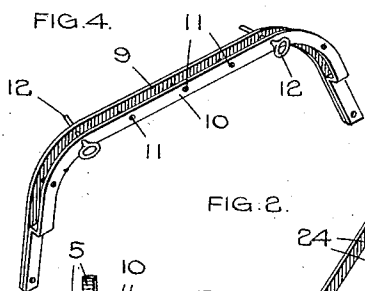


FIG. 2.

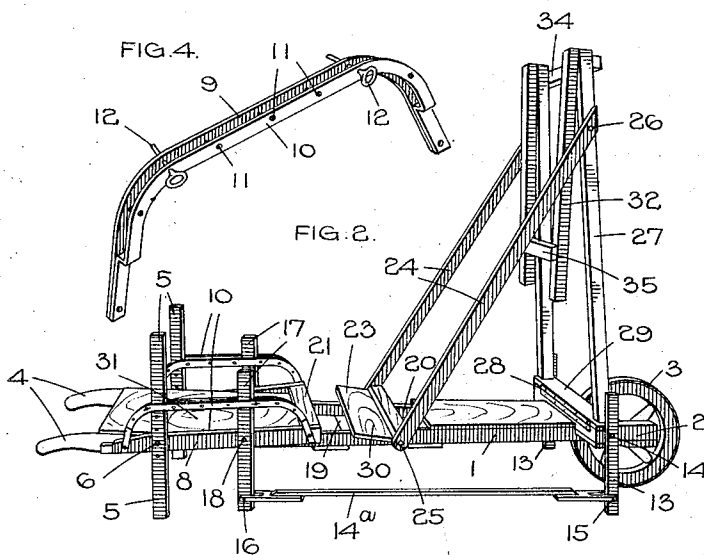
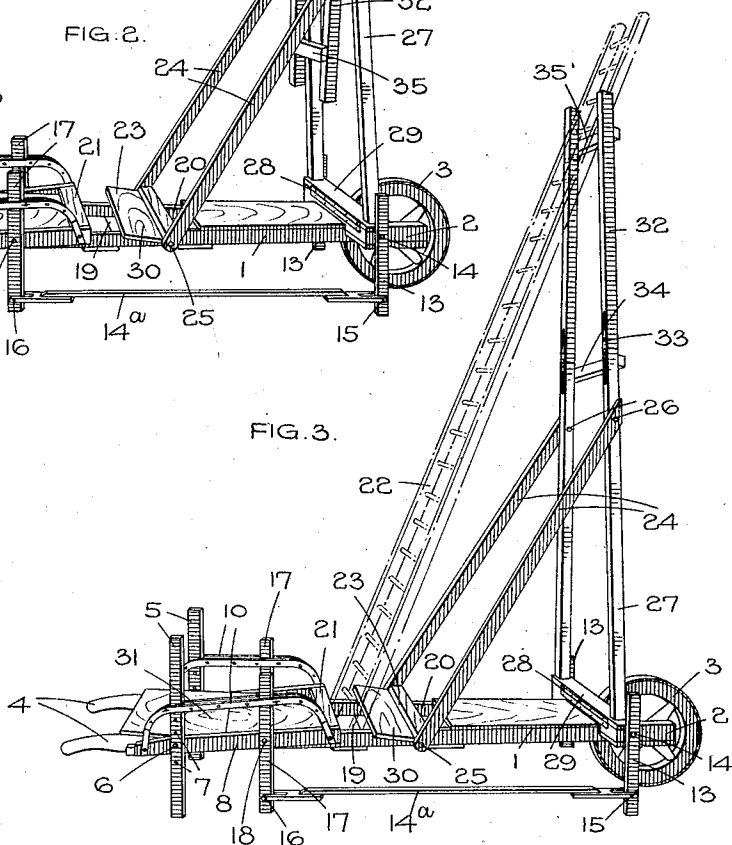


FIG. 3.



Inventor
Joseph M. Parry
By *Wm. H. Co.*
Attorneys

UNITED STATES PATENT OFFICE

JOSEPH MATTHEW PARRY, OF WEOBLEY, ENGLAND

LADDER

Application filed September 5, 1929, Serial No. 390,566, and in Great Britain July 23, 1929.

This invention relates to ladders and has for its object to provide a portable device for supporting a ladder in an erect or inclined position.

5 A further object of the present invention is to construct the ladder supporting device so that it can be adjusted to suit uneven ground.

10 A further object of the present invention is to construct the device so that it can readily be moved from place to place by one man and can be used with any ordinary form of ladder.

15 The present invention provides apparatus which is particularly useful in connection with fruit picking as the apparatus constitutes means for supporting a ladder for picking the outside of a tree without resting the ladder against the tree which is the present
20 usual practice and which is harmful to the trees.

Further, apparatus constructed in accordance with my invention also enables the ladder to be supported within the circumference of the tree again without damaging the
25 tree or knocking down the fruit.

The apparatus can of course be used for many other purposes than fruit picking.

Referring to the drawings:—

30 Figure 1 is a perspective view of the apparatus in its folded position.

Figure 2 is a perspective view of the apparatus in a partly extended position.

35 Figure 3 is a perspective view of the apparatus showing it fully extended.

Figure 4 is a perspective view showing a detail.

40 In the construction illustrated the apparatus comprises a frame 1 having block members 2 at the forward end between which a wheel 3 is mounted.

At the rearward end the frame terminates in handles 4 and at the same end it is provided with adjustable legs 5.

45 These legs are pivoted to the frame at 6 and an adjustment in the effective length of each of these legs is permitted by providing them with a series of holes 7 any one of which can engage with the pivot 6 carried
50 by the frame.

The frame 1 is provided with a pair of longitudinal members 8 which carry guide bars 9 each guide bar 9 also carrying a somewhat similar bar 10 which is attached thereto on its ends but spaced away therefrom
55 along the greater part of its length.

The bars 9 and 10 are provided with holes 11 and locking pins such as 12.

60 The upper end of each of the legs 5 projects between the bars 9 and 10 and a pin such as 12 can be passed through the leg to lock it in an adjusted angular position or two pins such as 12 may be used passing on either side of the leg 5 so as to prevent it from
65 rocking on its pivot 6.

At its forward end the frame is further provided with legs 13 which are pivoted at 14 to the frame and these legs 13 are connected by links 14^a pivoted at 15 to the legs 13 and at 16 to operating levers 17. The
70 operating levers are pivoted at 18 to the members 8 and they pass between the bars 9 and 10 and can be locked thereto by one or a pair of the locking pins 12 similar to the legs 5.

75 The effective length of any of the legs 5 or 13 can thus be adjusted by turning the leg on its pivot and then locking it in an adjusted position while a further adjustment is provided for the legs 5 by reason of the holes 7.

80 The middle part of the frame 1 is provided with pockets one 19 and the other 20 either of which can receive the lower end of a ladder. The cross bar 21 connecting the members 8 will form an abutment to prevent the lower end of a ladder such as 22 from slipping backwardly while if the lower end of a ladder is placed in the pocket 20 instead of in the pocket 19 a cross member 23 will prevent its lower end from slipping backwardly. The
85 cross member 23 connects the pair of stays 24 which are pivoted at 25 to the frame 1 and have their upper ends detachably connected by pins 26 to a frame 27 which is hinged at 28 to a cross bar 29 at the forward part of the
90 frame 1.

To the rear of the pocket 20 is a footboard 30 and to the rear of the pocket 19 is a footboard 31.

95 The upper end of the frame 27 carries an

extension frame 32 which is hinged at 33 to the frame 27.

If a relatively short ladder is to be used it is placed in the pocket 20 and rests against the cross bar 34 of the frame 27 but if a long ladder such as 22 is to be used then the extension frame 32 is turned upwardly about its pivot and the upper part of the ladder rests against a cross bar 35 on the extension frame 32.

The whole apparatus will fold into the position shown in Figure 1 by first removing the ladder then folding down the extension frame 32, after which the pins 26 are removed and the stays 24 turned rearwardly on their pivots 25. The frame 27 can now be turned downwardly on its hinge 28 and the legs 13 can be folded by operating the levers 17.

What I claim then is:—

1. A ladder supporting device comprising a movable platform on which the end of a ladder is adapted to rest, a single supporting wheel at one end of said platform, legs at both ends of said platform adapted to form a support therefor when it is not being moved, a collapsible frame mounted on said platform for supporting a ladder intermediate its ends, collapsible supporting means for retaining said ladder support in an erected position and means for adjusting the position of said legs.

2. A ladder supporting device comprising a movable platform on which the end of a ladder is adapted to rest, a single supporting wheel at one end of said platform, legs at both ends of said platform adapted to form a support therefor when it is not being moved, means for adjusting the position of said legs, a collapsible frame mounted on said platform for supporting a ladder intermediate its ends, collapsible supporting means for retaining said ladder support in an erected position and means for extending said ladder support.

3. A ladder supporting device comprising a movable platform on which the end of a ladder is adapted to rest, a single supporting wheel at one end of said platform, legs adapted to support the platform when it is not being moved, means for adjusting the position of said legs, means for locking said legs in an adjusted position, a collapsible frame mounted on said platform for supporting a ladder intermediate its ends, collapsible supporting means for retaining said ladder support in an erected position, means for extending said ladder support and said platform having a pocket for restraining the lower end of a ladder against movement.

4. A ladder supporting device comprising a movable platform on which the end of a ladder is adapted to rest, a single supporting wheel at one end of said platform, legs at that end of the platform opposite to the end at which the supporting wheel is disposed, said legs having a series of holes and

being adjustable, a pin for each leg adapted to be passed through any one of said holes in the leg, supporting guides adapted to additionally support said legs and having a series of holes, pins adapted to fit in said holes in the said guides for locking said legs in an adjusted position, a collapsible frame mounted on said platform for supporting a ladder intermediate its ends, collapsible supporting means for retaining said ladder support in an erected position and said platform having a pocket for restraining the lower end of a ladder against movement.

5. A ladder supporting device comprising a movable platform on which the end of a ladder is adapted to rest, a single supporting wheel at one end of said platform, adjustable legs at that end of the platform opposite to the end at which the supporting wheel is disposed, pivotal legs at the same end of the platform as the supporting wheel, means for adjusting said pivotal legs, a collapsible frame mounted on said platform for supporting a ladder intermediate its ends, collapsible supporting means for retaining said ladder support in an erected position, means for extending said ladder support and said platform having a pocket for restraining the lower end of a ladder against movement.

6. A ladder supporting device comprising a movable platform on which the end of a ladder is adapted to rest, a single supporting wheel at one end of said platform, legs at that end of the platform opposite to the end at which the supporting wheel is disposed, said legs having a series of holes and being adjustable, a pin for each leg adapted to be passed through any one of said holes in the leg, supporting guides adapted to additionally support said legs and having a series of holes, pins adapted to fit in said holes in the said guides for locking said legs in an adjusted position, adjustable pivotal legs at the same end of the platform as the supporting wheel, pivotal levers on said platform, links connecting said levers to said pivotal legs, pins adapted to fit in said holes in said guides for locking said levers and said pivotal legs in an adjusted position, a hinged frame mounted on said platform for supporting a ladder intermediate its ends, hinged stays for retaining said ladder supporting frame in an erected position, means for extending said ladder support and said platform having pockets for restraining the lower end of a ladder against movement.

7. A ladder supporting device comprising a movable platform on which the end of a ladder is adapted to rest, handles on said platform, a single supporting wheel at one end of said platform, legs at that end of the platform opposite to the end at which the supporting wheel is disposed, said legs having a series of holes and being adjustable, a pin

for each leg adapted to be passed through
any one of said holes in the leg, supporting
guides adapted to additionally support said
legs and having a series of holes, pins adapt-
ed to fit in said holes in the said guides for
locking said legs in an adjusted position,
pivotal legs at the same end of the platform
as the supporting wheel, pivotal levers on
said platform, links connecting said levers to
said pivotal legs, pins adapted to fit in said
holes in said guides for locking said levers
and said pivotal legs in an adjusted posi-
tion, a hinged frame mounted on said plat-
form for supporting a ladder intermediate
its ends, hinged stays for retaining said lad-
der supporting frame in an erected position,
means for extending said ladder support and
abutments on said platform against which
the lower end of a ladder is adapted to en-
gage.

In witness whereof I affix my signature.
JOSEPH MATTHEW PARRY.