

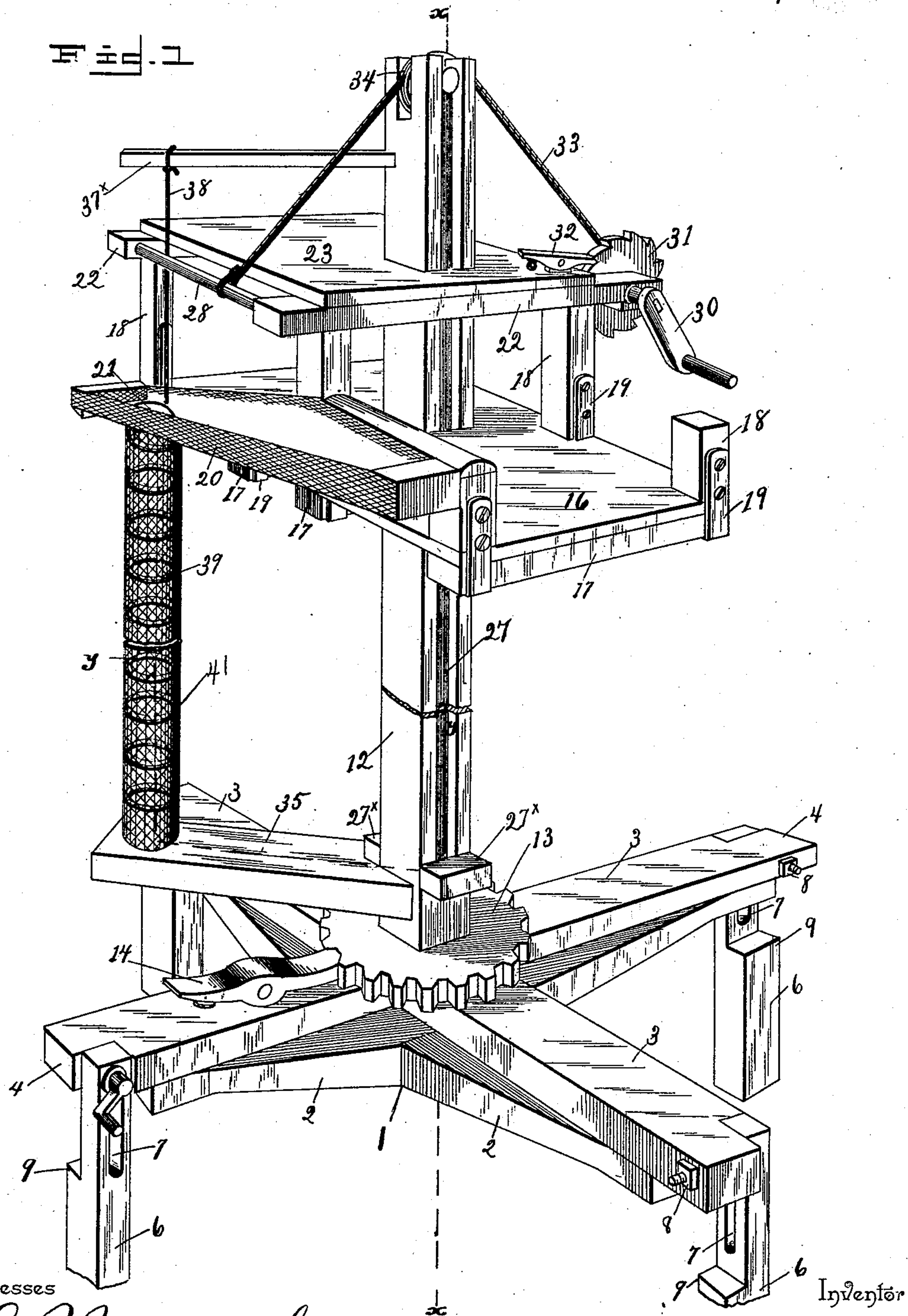
(No Model.)

2 Sheets—Sheet 1.

W. P. WADSWORTH.
FRUIT GATHERER.

No. 509,007.

Patented Nov. 21, 1893.



Witnesses

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Chas. E. Hoyer

By *his* Attorneys,

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Inventor

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2 Sheets—Sheet 2.

Patented Nov. 21, 1893.



Inventor

W^d Wadsworth

to.

UNITED STATES PATENT OFFICE.

WILLIAM P. WADSWORTH, OF ZOLFO, FLORIDA.

FRUIT-GATHERER.

SPECIFICATION forming part of Letters Patent No. 509,007, dated November 21, 1893.

Application filed September 15, 1892. Serial No. 445,981. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. WADSWORTH, a citizen of the United States, residing at Zolfo, in the county of De Soto and State of Florida, have invented a new and useful Fruit-Gatherer, of which the following is a specification.

This invention relates to certain new and useful improvements in fruit gatherers and has for its object, to provide such a construction and arrangement of parts that the fruit may be readily gathered and be uninjured during its transportation or transfer from the point of gathering to a suitable receptacle below, and with this object in view the invention consists of the construction and arrangement of parts as will be more fully hereinafter described and claimed.

In the drawings:—Figure 1 is a perspective view of the improved device shown in position for gathering fruit. Fig. 2 is a section on the line *x. x.* Fig. 1. Fig. 3 is a top plan view of the device. Fig. 4 is a section on the line *y. y.* Fig. 1.

Similar numerals of reference are employed to indicate corresponding parts in the several figures.

Referring to the drawings, the numeral 1 designates a base consisting of a series of inclined bottom trusses 2, upon which are secured angularly disposed arms 3, having the ends 4 thereof mortised or cut away and having horizontal openings 5, extending there-through. In the mortised cutaway portions of the arms 3, are mounted adjustable legs 6, having slots 7, in the upper portions thereof through which are passed bolts with clamping nuts 8 thereon, and below said slot 7, are formed shoulders 9. The adjustability of the legs 6 may be conveniently employed to compensate for the irregularity of the surfaces upon which the device may rest and thereby sustain the same in perpendicular stable position. At the central intersection of the arms 4, a steel plate 10, of circular form is mounted and provides a turn-table from the center of which rises a post 11, extending through the arms and into the central intersecting portion of the trusses 2. On the said post 11, is mounted the central standard 12, the latter being adapted to freely rotate if so desired and having a toothed wheel 13, se-

cured to its lower end and bearing on the plate 10, when in proper position. To one portion of one of the arms 3 is secured a spring actuated pawl 14 adapted to engage the teeth of the wheel 13 and thereby properly hold the standard 12 in its adjusted position. On the standard 12 is mounted a platform frame 15, which is vertically adjustable and consists of a lower platform 16, with under cross-strips 17 and uprights or posts 18, the said posts 18 and the cross-strips 17, being bound to each other by steel bands 19, in addition to what other fastenings may be employed to securely and firmly hold the parts together. On one side of the frame 15, and extending from the upper portion of one of the end posts 18, obliquely downwardly to the lateral extension of one of the cross strips 17, is a trough 20, constructed of suitable fabric or cloth and having an opening 21, in the lowermost end thereof. On a portion of the posts 18 are mounted cross sills 22, which project at their opposite ends beyond the said posts and on which is mounted an upper platform 23, said platform and cross sills supporting under strips 24 and 25, disposed respectively transversely and longitudinally of the under side of the platform 23 and arranged in T-shaped form. The strip 25 supports a pair of rollers 26, fixed in said strips by means of suitable castings to have a free rotation and adapted to engage a groove in the adjacent side of the standard 12. The said standard is provided on its opposite sides with grooves 27, and a cross sill 22 nearest the said standard is in like manner provided with a pair of rollers 26 similar to those mounted in the strip 25. In like manner the two central strips 17, fixed to the under side of the platform 16, are each provided with a pair of the rollers 26, and by this means it will be seen that the movement of the frame 15 entire is made more sensitive and thereby more readily adjusted either in elevating or lowering the same. Each of the platforms 16 and 23, is formed with an opening through which the standard 12 extends, and on the lower portion of the said standard are oppositely disposed stops 27*, adapted to be contacted by the inner strips 17 of the platform 16 and limit the downward movement of the frame 15.

In one set of the projecting ends of the

cross-sills 22, is mounted a cross-bar 28, and in the opposite set of the projecting ends of said sills is mounted a windlass 29, having an operating crank handle 30, and a ratchet wheel 31, adapted to be engaged by a pawl 32, mounted on the platform 23 in relative position thereto and adapted to lock the ratchet wheel 31 against movement. A suspending rope 33 of suitable nature is connected to the cross-bar 28, at one end and passes up over a pulley 34 in the upper portion of the standard 12, and thence downward to the windlass 29, around which it may be wound or unwound as found necessary and desirable. It will be observed that the crank handle 30 of the windlass 29 is located in convenient operating position to the platform 16, and by this means the operator may stand on the said platform 16, and elevate or lower the frame 15 to any desired height. By this means and through the revolving construction of the standard the frame 15, may be positioned conveniently to gather the fruit and elevated proportionately to the height of the tree or the branches from which it is desired to clip the fruit.

From the lower part of the standard 12, extends an arm 35, arranged at a right angle and disposed in such manner as to extend beyond the base of the device and is formed with an opening 36, in which is fitted a cushioned spool 37, consisting of an outer cloth covering with a filling of hair or analogous material. To the upper part of the standard is secured another arm 37^x, which is parallel with the arm 36 and has secured thereto a guide cord or rope 38, which extends through the trough 20 and has its lower ends secured to the arms 35. A series of rings 39 are connected at opposite sides to ropes or cords 40, secured to the under portion of one end of the frame 15 and also to that portion of the arm 35 around the spool 37, said rings being surrounded by a net work tube 41, and by this means the fruit as it passes through the opening 21 in the trough 20, is conveyed to and through the spool 37, and said rings are elevated or lowered to place the tube in proper position as the frame 15 is elevated or lowered. Each of the rings 39 is provided with a sleeve 42 which is mounted on the guide cord or rope 38 and acts to properly hold the rings in line and keep the tube supported by said rings from swaying, also to assist in the elevation and lowering of the said tube as the frame 15 is elevated or lowered. When the rings 39 are lowered they drop down over the spool 37 and carry the tube therewith and are thereby always arranged in proper position to be raised directly over the spool.

A suitable sizer may be placed under the arm 35, to receive the fruit after it passes through the spool 37, or a suitable box or receptacle may be placed under said arm.

The parts of the entire device may be constructed of any suitable material and the device as a whole may be made in different sizes to suit different purposes.

The gatherer herein before set forth is especially adapted for gathering oranges and is to be moved from one tree to another, it being of a portable nature. It will be understood however, that the gatherer may be used in picking other fruits equally as well as in picking oranges.

Having thus described the invention, what is claimed as new is—

1. In a fruit gatherer, the combination with a supporting base, of a standard rotatably mounted upon said base, a platform vertically adjustable upon said standard, a conveyer supported by said platform, and elevating devices for raising and lowering the platform, substantially as specified.
2. In a fruit gatherer, the combination of a base provided with radial arms, supporting legs adjustably connected to the terminals of said arms, a clamping device for securing said arms to the supporting legs in the desired relative positions, a rotatable standard mounted upon said base, a platform slidably mounted upon the standard and provided with suitable elevating devices, and a conveyer supported by the platform and provided at the plane of the latter with a suitable receiving trough, substantially as specified.
3. In a fruit gatherer, the combination with a supporting base, of a standard rotatably mounted upon said base and provided with a lower radial arm, a platform slidably mounted upon said standard and provided with suitable elevating devices adapted to be operated from the platform, a receiving trough carried by the platform, an extensible conveyer tube communicating at its upper end with said receiving trough and connected at its lower end to the said radial arm, and stop device secured to the standard slightly above the plane of the radial arm to limit the downward movement of the platform, substantially as specified.
4. In a fruit gatherer, the combination of a base, a standard rotatably mounted on said base, a frame adjustably mounted upon said standard and having a trough in connection therewith, a padded spool supported at the lower portion of said standard, and a netted tube in line with said spool and adapted to rise and fall with the said frame, substantially as described.
5. In a fruit gatherer, the combination of a standard, a frame vertically adjustable on said standard and having a trough in connection therewith with an opening in one end thereof, arms projecting from the upper and lower portions of said standard, a cord or rope connecting said arms, a padded spool mounted in the lower arm, cords extending from the under side of the trough downward to opposite sides of the spool, rings attached to said cord and provided with sleeves movably mounted on the cord or rope connecting the upper and lower arms of the standard, and a net work tube surrounding said rings, substantially as described.
6. In a fruit gatherer, the combination of a

base having adjustable feet and a central plate
to form a turn-table with a post centrally rising
therefrom, a standard rotatably mounted on
said post and having a toothed wheel at its
5 lower end adapted to be engaged by a pawl
and the opposite sides thereof formed with
grooves, a frame mounted on said standard
and adjustable vertically consisting of upper
and lower platforms under which are located
10 rollers engaging the grooves of the standard,
a windlass mounted on one side of the frame,
a pulley in the upper end of the standard and

a cord connecting one side of the frame with
the windlass and passing over said pulley,
said frame having a trough in connection 15
therewith to receive the fruit, substantially
as described.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

WILLIAM P. WADSWORTH.

Witnesses:

W. C. CREWS,
CRAWFORD CREWS.