(Model.)

H. H. BARNES.

Portable Elevator.

No. 228,591. Patented June 8, 1880.

Fig. 1

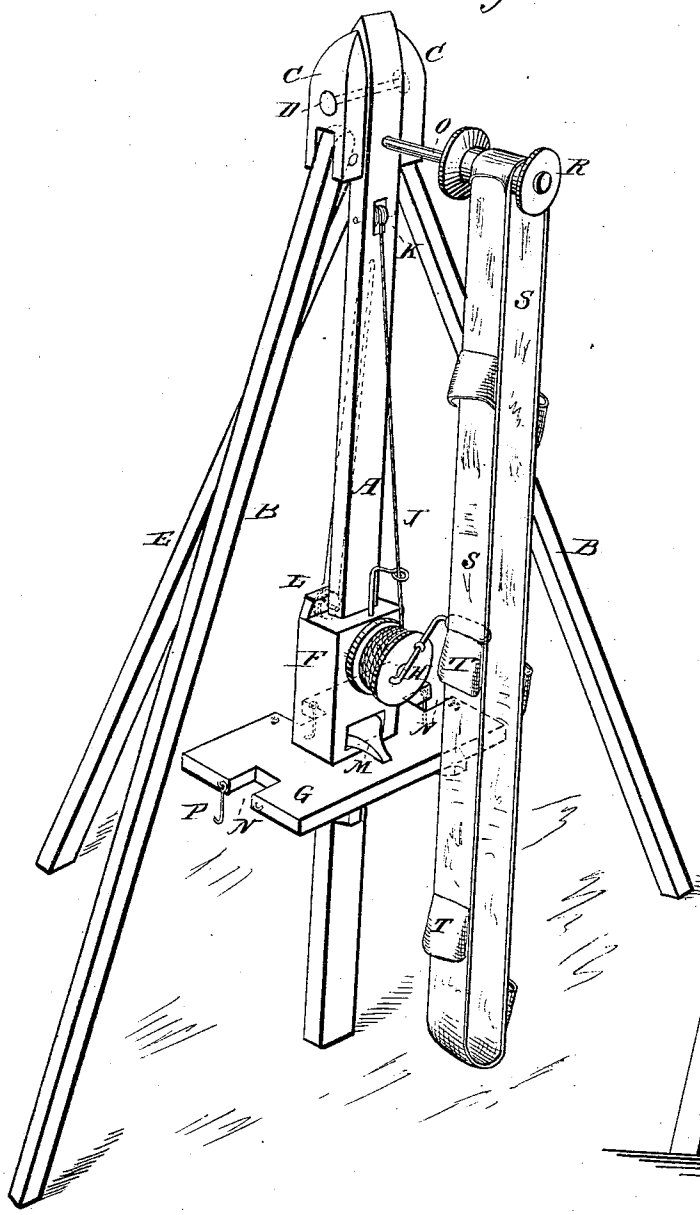
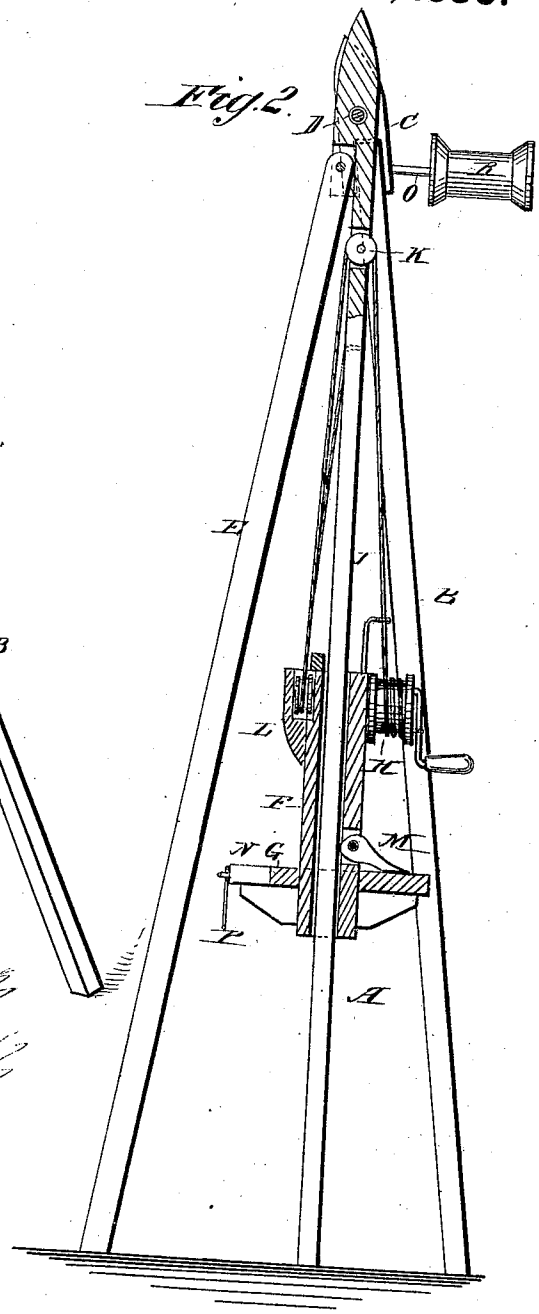


Fig. 2



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UNITED STATES PATENT OFFICE.

HORACE H. BARNES, OF DRYDEN, MICHIGAN.

PORTABLE ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 228,591, dated June 8, 1880.

Application filed March 26, 1880. (Model.)

To all whom it may concern:

Be it known that I, HORACE HOLCOMB BARNES, of Dryden, in the county of Lapeer and State of Michigan, have invented a new and Improved Portable Elevator, of which the following is a specification.

The object of my invention is to provide a new and improved portable elevator which is to take the place of ladders, is simple in construction, and convenient in use.

The invention consists in a portable elevator formed of a central post provided with a number of pivoted braces and surrounded by a sliding box-platform provided with a windlass, the rope of which passes over suitable pulleys and is fastened to the central post, so that by winding the rope onto the drum of the windlass the platform and the person on it are raised to any desired height, and may be held there by a pivoted brake-pawl.

In the accompanying drawings, Figure 1 is a perspective view of my improved portable elevator, showing a pocket-belt passing over a pulley of the elevator. Fig. 2 is a partial cross-sectional and side elevation of my improved elevator.

Similar letters of reference indicate corresponding parts.

The post A, which forms the central guide-post for a portable elevator, is braced by means of the struts or braces B B, pivoted in blocks C C, which in turn are pivoted to two opposite sides of the post A, at its upper end, by the pintle D, and is also braced by the strut or brace E, pivoted in a head at the top of the post A. By means of these braces the post A can be held firmly, and cannot topple over, even if a great weight is concentrated at its point.

A box, F, closely surrounds the post A, and a platform, G, and windlass H are attached to this box. The rope J of the windlass H passes over a pulley, K, near the top of the post, over a pulley, L, on the side of the box F opposite to the one to which the windlass is fastened, and is then fastened to the post A a short distance below the pulley K. A cam-brake, M, is pivoted in the lower part of box F, so that it can easily be operated by the foot of the person on the platform.

The platform G is provided with recesses N N, into which the struts B and E pass when the elevator is folded for transportation. They are retained in these recesses by the hooks P P.

A shaft, O, projects outward from the top of the post A, and upon this shaft a flanged pulley, R, is mounted. An endless belt, S, provided with a series of pockets, T T, passes over this pulley, and must be of sufficient length to reach to the ground.

The operation is as follows: When not in use the apparatus is folded, the struts being held in the recesses N N by the hooks P P, so that it can be easily transported to any desired place. In erecting the elevator a good bearing is given to the post A, and the struts are arranged so as to prevent any shaking or shifting of the post A. A person steps onto the platform and elevates himself by winding the rope or chain J onto the windlass H.

The platform can be held in any desired position by depressing the front end of cam-lever M, for by this operation the cam is pressed against the post with sufficient force to lock the box F and platform G in the desired position.

If two of the within-described elevators are placed a short distance apart, and planks pass from one platform to the other, a good scaffolding for masons, carpenters, or painters is formed.

The within-described elevators are especially well adapted for picking fruit, as the upper end does not need to rest against limbs, and as every part of the tree can be reached very easily. The fruit is deposited in one of the pockets, T, of the belt S, and is deposited on the ground when the pocket reaches the lowest point of the belt S.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A portable elevator consisting of the central post, A, braces B, pivoted in blocks C, the pin D, strut E, pivoted to top of post, the box F, carrying a platform, G, and windlass H, the rope J, and pulleys K L, all combined and arranged as shown and described.

HORACE HOLCOMB BARNES.

Witnesses:
PHILANDER H. FOOT,
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