(No Model.)

M. H. MURPHY.

FRUIT LADDER.

No. 380,763. Patented Apr. 10, 1888.

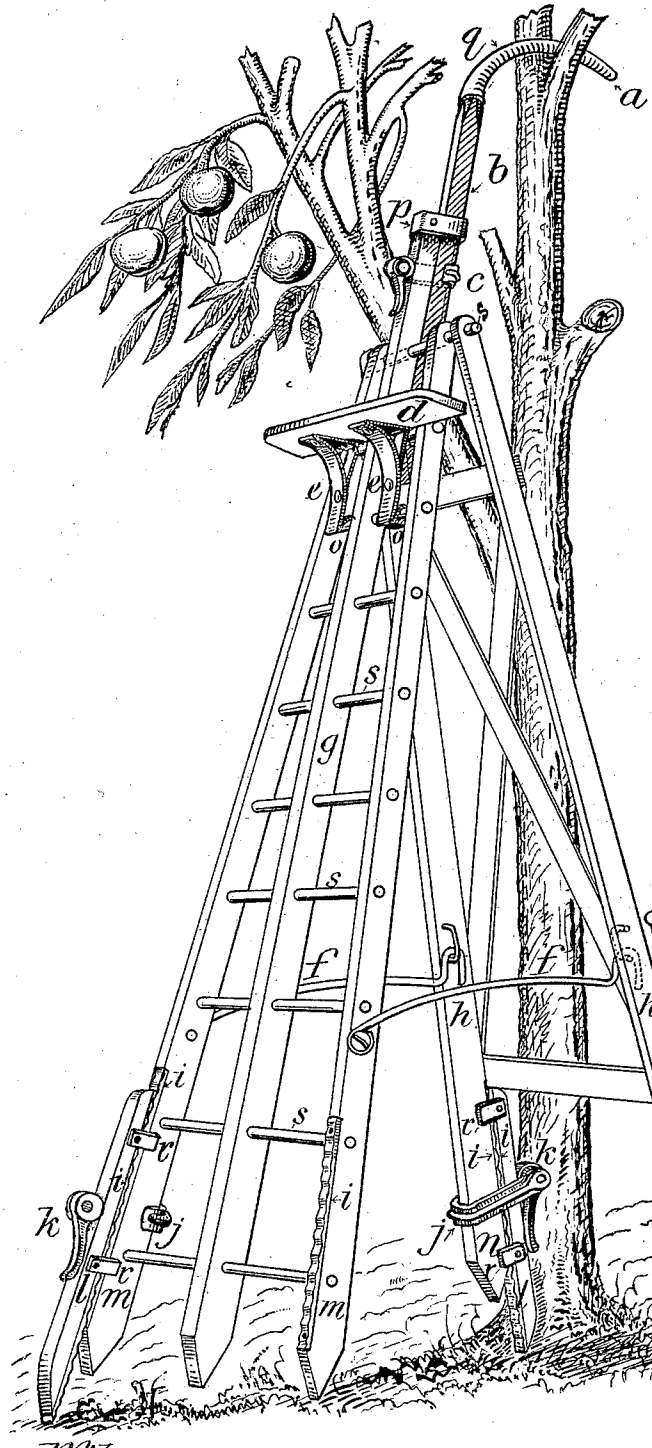


Fig. 1.

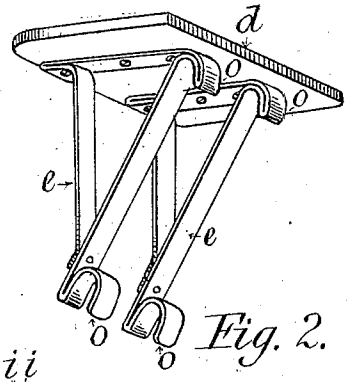


Fig. 2.

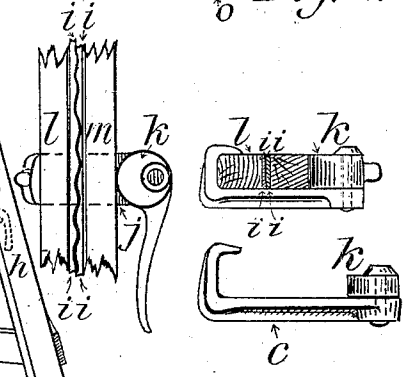


Fig. 3.

Witnesses.
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UNITED STATES PATENT OFFICE.

MATTHEW H. MURPHY, OF PORTLAND, OREGON.

FRUIT-LADDER.

SPECIFICATION forming part of Letters Patent No. 380,763, dated April 10, 1888.

Application filed February 13, 1886. Serial No. 191,877. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW H. MURPHY, of Portland, in the county of Multnomah and State of Oregon, have invented a new and Improved Fruit-Ladder, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved ladder for picking fruit especially, which is convenient and does not injure the branches of the trees.

The invention consists in the combination, with the outside bars, with center bar, and series of rounds, of legs mounted to turn on the uppermost round, and of an extension-bar with curved hook projecting from the top of said extension-bar, covered with heavy felt or any other soft material.

The invention further consists in the combination, with the said ladder, of a step having hooked brackets for suspending it from any of the desired rounds.

The invention further consists in the combination, with the said ladder, to which I attach to the side bars and legs an adjustable foot, as indicated in the accompanying drawings, to be used upon uneven ground, the said foot-piece being firmly held in position by means of an eccentric-clasp.

Figure 1 is a perspective view of my improved fruit-ladder as placed ready to ascend for picking fruit, with parts attached. Fig. 2 is a view of the adjustable step with brackets attached to the same. Fig. 3 represents sectional views of adjustable foot, indicated by letter *r* to correspond with main drawings.

The legs *n* have their upper ends pivoted on uppermost round *s* of a series of rounds, *s*, which passes through the side bars, *m*, and center bar, *g*. The hooks *f* are pivoted to the side bars, *m*, and can be hooked in staples on the inside of the legs *n*, to hold the legs and bars *m* in proper inclination. In closing the ladder the hooks *f* will pass through the staples *h*, thus locking the bars and legs together when not in use.

At the lower end of the side bars, *m*, I apply an adjustable foot, *l*; also, at the bottom of the legs *n*, I apply an adjustable foot, *l*, for use, as indicated in drawings, upon uneven ground. A corrugated metal plate, *i*, is attached to the edge of the side bars, *m*, and legs *n* with screws, to prevent the adjustable foot from slipping on the side bars and legs when in use. To keep the adjustable foot in position on the edge of the outside bars and legs, guides *r* are fastened upon the adjustable foot with bolts.

The clasp *j* and eccentric *k* are used to hold the said foot *l* and outside bars, *m*, firmly together, as indicated in the accompanying drawings, by the use of an eccentric, *k*, and clasp *j*. There are no bolt-slants or bolt-holes to weaken the parts. The adjustable clasp can be quickly put on or taken off at any time and leave the ladder intact.

The center bar, *g*, is employed for two purposes—first, to strengthen the ladder and to give it a broader base, thereby using lighter material for construction.

Secondly, on the top of the center bar, *g*, there is an extension-bar, *b*, on the extreme top of which is a curved hook, *a*, made either of iron or wood, covered with heavy felt *q* or any other soft material, to prevent injuring the branches or cutting the bark when adjusted to steady the ladder when in use.

The extension-bar *b* slides through a clip, *p*, fastened to the top of the center bar, *g*, and both are held firmly together by the eccentric-clasp *c*.

The adjustable step *d*, with the brackets *e*, made of iron or other material, with hooks *o*, to hook on two of the rounds *s* of the ladder, thereby placing the top of the step on the top of the ladder proper.

The step *d* can be attached to any of the rounds of the said ladder.

I am aware that a foot-extension adjustable upon the side bars by an eccentric-clamp is not of itself new, nor a hook between the ladder and the props adapted in closing to pass through its staples and lock the parts together is not in itself new.

By this contrivance a light, portable, and substantial ladder is provided, safe and convenient for all fruit-gathering purposes.

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

1. The combination of the side bars, *m*, middle bar, *g*, similar thereto, the rungs *s*, the props *n*, pivoted at the upper end of the side

bars, and the hooks *f*, substantially as described.

2. In a fruit-ladder, the combination, with the bars *m* and *g*, having rounds *s*, of the legs *n*, mounted to turn on the uppermost round *s*, the hooks *f*, passing through the staple *h*, locking the legs and bar together when closed, and the hook *a*, projecting from the top of the extension-bar *b*, having a heavy felt covering, *q*, substantially as herein shown and described.

3. In a fruit-ladder, the combination, with bars *m* and *g* and rounds *s*, of the legs *n*, mounted to turn on the uppermost round *s*, and the hooks *f*, the step *d*, the brackets *e* on the same for suspending the step *d* from any of the rounds *s*, substantially as herein shown and described.

4. In a fruit-ladder, the combination, with the bars *m* and center bar, *g*, having rounds *s*, of the legs *n*, mounted to turn on the uppermost round *s*, the hooks *f*, and step *d*, with brackets *e* on the same, and the adjustable feet *l*, attached to the bars *m* and legs *n* by clasp *j*, held firmly by eccentric *k*, substantially as herein shown and described.

MATTHEW H. MURPHY.

Witnesses:
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