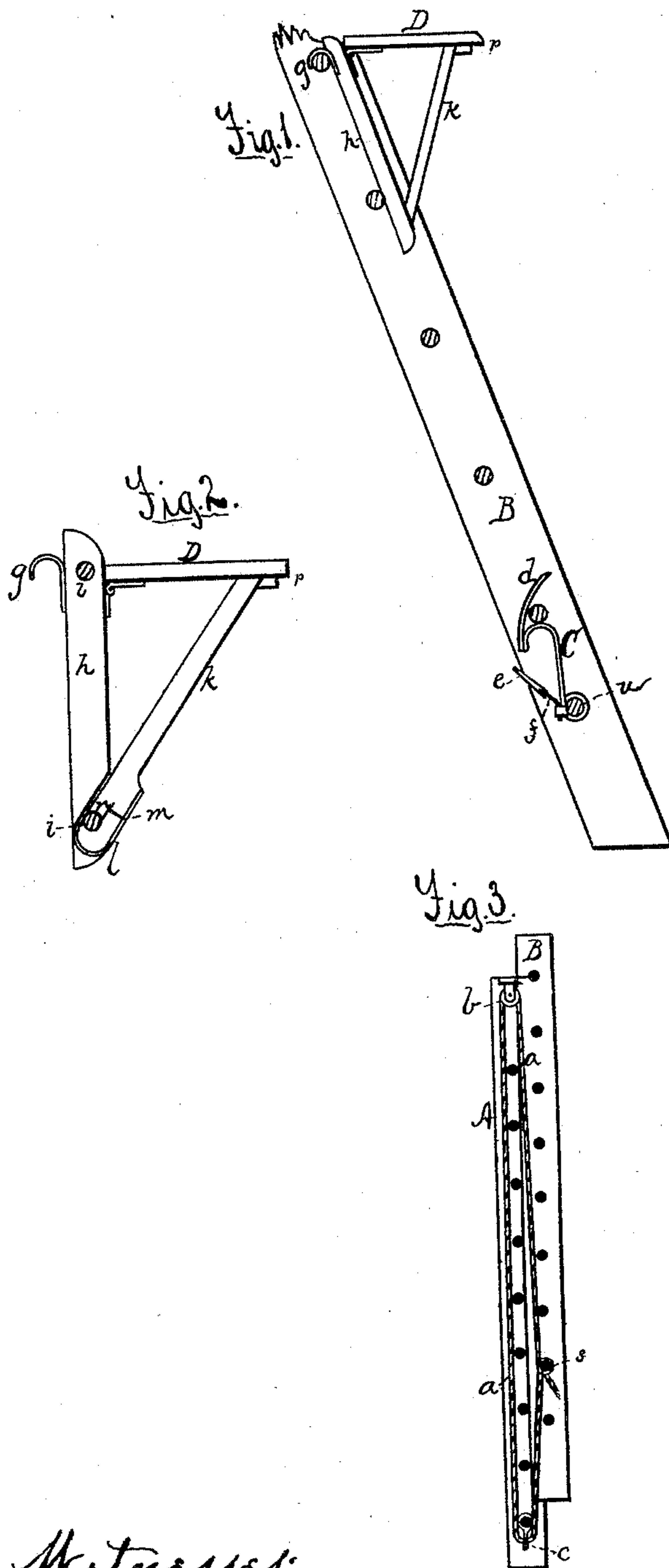


L. D. MASON.
LADDERS.

No. 185,251.

Patented Dec. 12, 1876.



Witnesses:
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UNITED STATES PATENT OFFICE.

LOUIS DEAN MASON, OF FARMERSVILLE, NEW YORK.

IMPROVEMENT IN LADDERS.

Specification forming part of Letters Patent No. **185,251**, dated December 12, 1876; application filed October 16, 1876.

To all whom it may concern:

Be it known that I, LOUIS DEAN MASON, of Farmersville, in the county of Cattaraugus and State of New York, have made certain Improvements in Fruit-Picking and Extension Farm Ladders, of which the following is a specification:

This invention is intended for general farm use, more especially for fruit-picking; and it consists, in connection with an extension-ladder, of an adjustable and independent platform, and in a combined trip and catch-hook connected to a lower loose round of the sliding ladder, and also in combination with an endless rope, all as hereinafter specified.

In the drawings, Figure 1 is a side elevation of a portion of one-half of the sliding or upper ladder, showing the catch-hook, its guard and trip, also the platform, in position. Fig. 2 is a detail of the platform, showing the angle adjustment. Fig. 3 is a vertical section of the ladders, showing the endless rope, &c.

A represents the lower ladder, and B the upper or sliding ladder, moving in metal guides attached to both sides, near the top of the lower ladder, and operated by an endless rope, *a*, which runs through a pulley, *b*, fastened to the under side of the upper rung of the lower ladder, and also through an eye or loop, *c*, attached to the lower round. This rope *a* is fastened at both ends, at *s*, to one of the lower rungs of the sliding ladder B. By this the ladder is raised or slid down either from the front or back. To hold the upper ladder at any height desired for fruit-picking or other purposes, I attach to the lower round *u* (which is loose) of the sliding ladder a hook, C. This hook is constructed with a slide or trip, *d*, attached to or forming a portion of the upper part of the hook, by which it, when the ladder is raised, slides the hook over the rounds until the hoisting is stopped, when, by its weight and the loose round *u*, it swings over and catches on the round just beneath it, the lower part of the hook being of course attached firmly to the loose round. When it is desired to raise the ladder higher this trip *d* causes it to slide over the rounds until the ladder is stopped, when it again swings into position on the round below it, as above explained. To lower the ladder and prevent

these hooks from catching I provide a tongue or guard, *e*, attached by a flexible piece, *f*, of leather, rubber, &c., to the lower part of the hook, as shown, the end of the tongue covering the end of the catch C when the ladder B slides down, and thus preventing the hook from catching. In sliding it down, if it is desired to stop it at any point the ladder is raised one round, when this guard *e* strikes against the round, and which opens it, allowing the hook to catch on the next round above. An ordinary flat hook is fastened to the other end of the round, and catches by the operation of the one just described; or two catch-hooks, like C, can be employed. These also hold the ladder B at any point.

For the purpose of fruit-picking more especially, I attach a platform, D, by hooks *g g*, to the topmost or other round of the upper ladder B. This platform is constructed of two upright pieces, *h h*, which rest against the rounds of the ladder, (to the backs of which the hooks *g* are attached,) and they are held together as a frame by two or more cross-pieces or rounds, *i i*. The platform proper, or foot-board, is hinged near the top of the frame, as shown, and folds down completely when not in use. When elevated it is kept in position by diagonal adjustable braces *k*, which have a metal loop, *l*, attached to the bottom of each brace, and which surround the round *i* of the frame *h*. The ends of these braces *h h* are cut into steps or notches *m n*, so that the elevation of the foot-board can be varied, according to the slant of the ladder, by setting the step *m* or *n* on the round *i* of the piece *h*. This brings the platform to a level, or nearly so, so that it can be stood upon safely. The upper ends of these braces *h* set against the bottom of the foot-board, and a cleat or strip, *p*, fastened to the under side of the platform, holds the ends securely. These braces fold into the frame-piece *h*, and the platform shuts down over both out of the way, and flat against the ladder, or can be set away separately.

It is portable, cheap, simple, and takes but little room. It is easily operated. By pulling the endless cord and raising the ladder B slowly, the catch C will take hold of any round, and by pulling fast it will slide by the

rounds. The guard *e* of the hook *C* prevents its catching when the ladder is lowered, except it be raised one or two rounds slowly.

I claim—

1. In combination with ladder or ladders *A* *B*, the adjustable folding platform *D*, constructed with the hinged foot-board, the frames *h h*, rounds *i i*, hooks *g g*, braces *k k*, with steps *m n* therein, and the loop or strap *l*, substantially as and for the purpose hereinbefore specified.

2. In combination with the loose round of

a sliding or extension ladder, the self-acting trip-hook *C d* and flexible guard *e f*, constructed and arranged as and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

L. DEAN MASON.

Witnesses:

J. R. DRAKE,
T. H. PARSONS.