

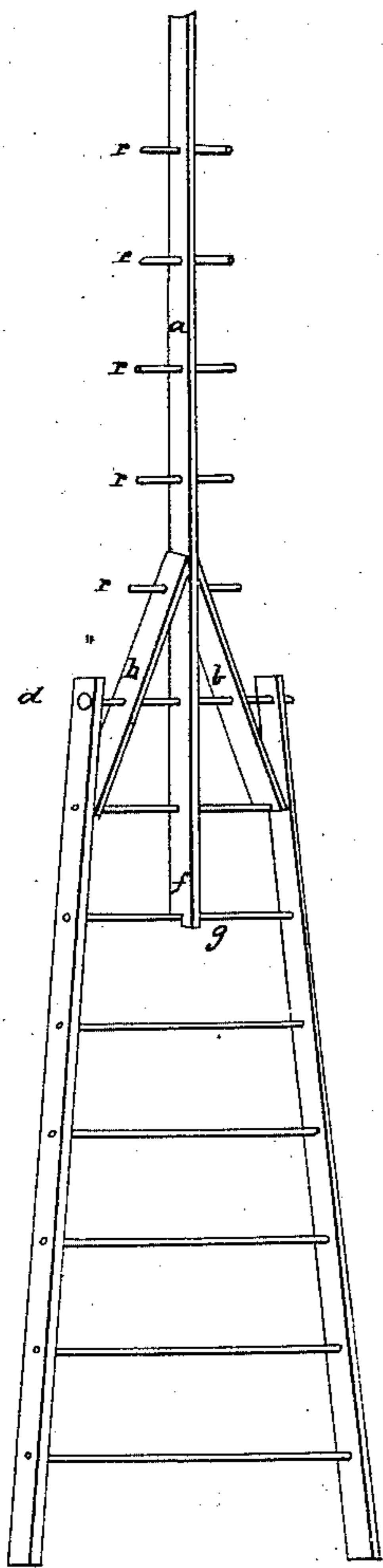
*E. I. Knowlton.*

*Farm Ladder.*

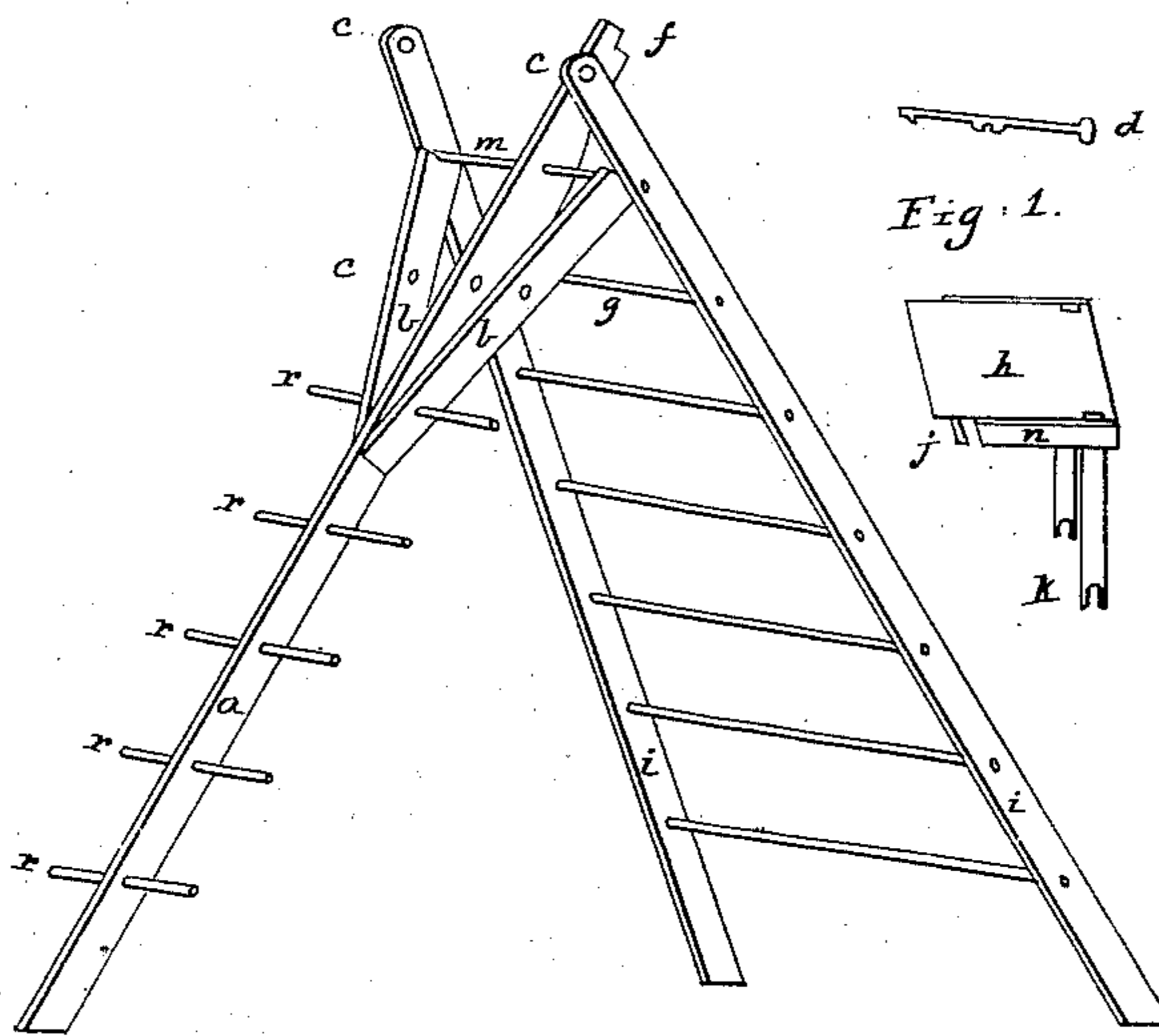
*N<sup>o</sup> 38,586.*

*Patented May 19, 1863.*

*Fig. 2.*



*Fig. 1.*



Witnesses:

*E. M. Pratt*  
*E. A. Collins*

Inventor:

*Ernest I. Knowlton*

# UNITED STATES PATENT OFFICE.

ERNEST I. KNOWLTON, OF SOUTH LYON, MICHIGAN.

## IMPROVEMENT IN LADDERS.

Specification forming part of Letters Patent No. 38,586, dated May 19, 1863.

*To all whom it may concern:*

Be it known that I, ERNEST I. KNOWLTON, of the township of Lyon, county of Oakland and State of Michigan, have invented an Improvement in Ladders; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying diagram of "Knowlton's farm-ladder," which diagram forms part and parcel of this specification, and to the letters of reference marked thereon.

The nature of my invention consists in an improved ladder, said improvement consisting in attaching to the upper part of an ordinary ladder a single-footed adjustable standard, *a*, and adjustable table *h*, as represented in the aforesaid diagram.

Figure 1 is a three-footed self-supporting fruit-ladder used for gathering fruit, grafting trees, &c., the front part resembling a common ladder, with this variation, that the two top rounds, *d* and *m*, fit loosely in the sides *i i*, and the holes for the second round, *m*, are placed about one inch one side of the range of the other rounds, to facilitate the folding of the two parts of the ladder for carrying it about, the sides *i i* being usually each about ten and one-half feet long, four feet apart at the bottom ends and twenty inches apart at the top, the back part being a single-footed standard, *a*, also ten and one-half feet long, attached firmly to the second round, *m*, from the top of the front part, and extending a sufficient distance beyond to lap onto the third round, *g*, when brought in contact with the same, said standard *a* being supported by a brace, *b*, on each side, and having pins *r* passing through it horizontally, of sufficient length and size to be used as ladder-rounds. The first or top round, *d*, in the front part, passing loosely into the open holes *c c c*, can be readily placed or detached at will. *h* is a two-legged table easily adjusted on any two

rounds of the front part of the ladder, having a cleat, *j*, extending across the under side of the back end, and a cleat, *n*, on each side extending to within the diameter of the round of the back cleat, *j*, and, having the feet of the legs *k* furcated, the back end of the table will rest securely on one round, while the front end is supported by the two legs, resting also securely on the next round below by means of the furcated feet *k*.

Fig. 2 is a straight ladder used in climbing tall trees, stacks, buildings, &c. It is formed from Fig. 1 by simply raising the back part or standard *a* to a line with the front part, so that the notch *f* will rest on the third round, *g*, and then inserting the adjustable round or pin *d* through the open holes *c c c*, thus forming a stiff joint with the strength of three rounds.

I claim—

1. The adjustable single-footed standard *a*, pins *r*, braces *b*, and pin *d*, in connection with the front part, *i i*, substantially as and for the purposes described.

2. The table *h*, with the cleats *j* and *n*, and furcated legs *k*, substantially as and for the purposes described.

3. I do not claim the front part of Fig. 1 entire, but I do claim the variations made by the two top rounds, *d* and *m*, both fitting loosely in the sides *i i*, and the second, *m*, being placed about one inch one side of the line of the remaining rounds.

4. A joint in the center of the ladder formed by the adjustability of the two upper rounds of the lower part, *d* and *m*, and the lapping of the notch *f* at the lower end of the extending part *a* onto the third round, *g*.

ERNEST I. KNOWLTON.

In presence of—

E. A. CALKINS,  
E. M. PRATT.