

E. Slater.

Extension Ladder.

No. 59,666.

Patented Nov. 13, 1866.

Fig. 1.

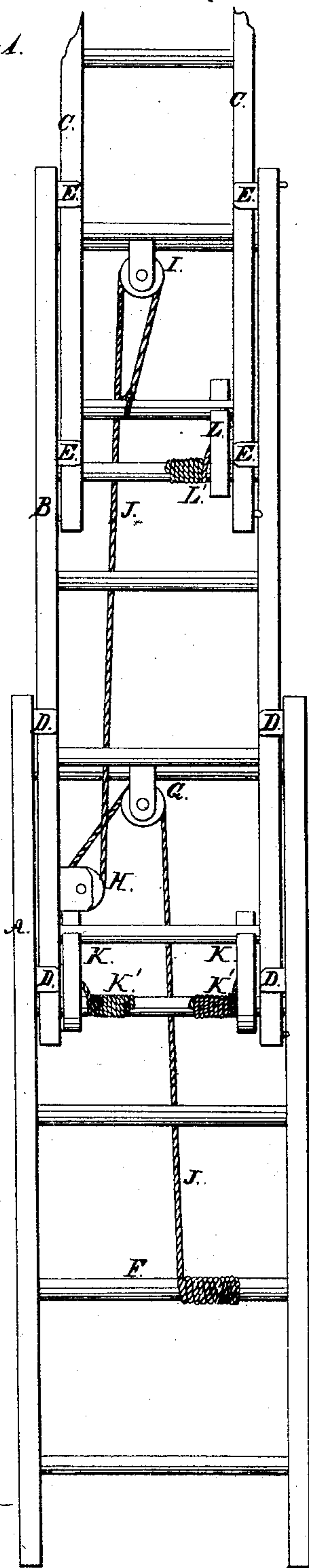


Fig. 2.

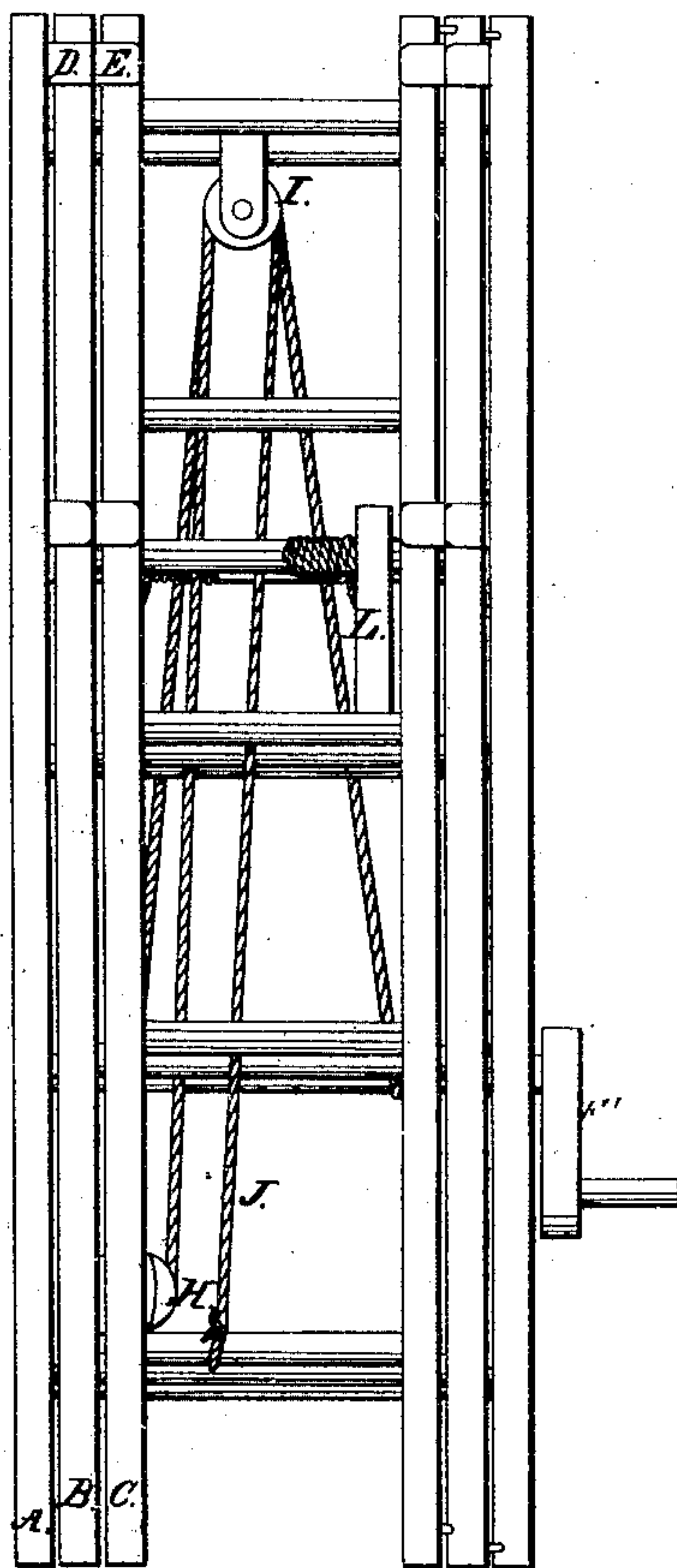
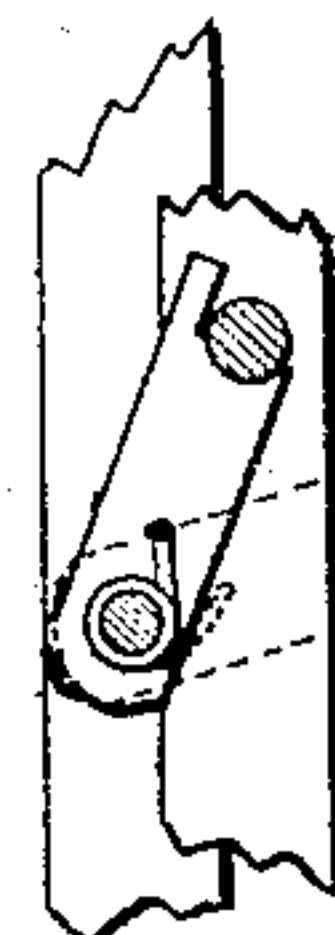


Fig. 3.



Inventor:

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Witnesses:

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UNITED STATES PATENT OFFICE.

ERASTUS SLATER, OF GIRARD, PENNSYLVANIA.

IMPROVEMENT IN FRUIT EXTENSION-LADDERS.

Specification forming part of Letters Patent No. 59,666, dated November 13, 1866.

To all whom it may concern:

Be it known that I, ERASTUS SLATER, of Girard, in the county of Erie and State of Pennsylvania, have invented new and useful Improvements in Fruit Extension-Ladders; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a view of the ladder when extended. Fig. 2 is a view when contracted, and Fig. 3 is a section showing the operation of the brace.

Like letters refer to like parts in the several views.

I construct my ladder of two or more sections. Three is the preferable number, and are seen at A B C in Figs. 1 and 2. The side bars of the sections are made parallel to each other. The section B fits just inside the section A, and the section C fits just inside of the section B. The sections A and B are secured together by iron clasps D, attached to section A, and permits the section B to slide up and down freely therein. The section C is secured to the section B by clasps E, in the same way that B is secured to A, which permits the section C to slide up and down on section B. F represents a windlass-roller, secured in the side bars of section A, and serves also as a round for the ladder. The windlass-round F is provided with a crank, F', by which it is rotated when desired. G represents a pulley which is attached to the upper round of section A. H represents a pulley attached to the side bar of section B, near the lower end, and

I represents a pulley attached to the upper round of section B. A rope, J, is secured to the windlass-round F, passes up through pulley G, down through pulley H, up through pulley I, and the end secured to the first round below.

By turning the crank F' the rope J is wound around the windlass-round F, by which operation the sections B and C are drawn up from their position in Fig. 2 to that shown in Fig. 1.

To the second round from the top of sections A and B, I attach spring-catches K K L, all of which are thrown forward by coiled springs K', K', and L' to nearly right angles with the side pieces of the sections. These catches are notched at their free end to receive any round of the sections that may pass over them. Thus the sections can be raised and retained at any desired height.

The sections can be returned to their position in Fig. 2, turning the crank just enough to free the catches from the rounds, when they will be moved forward by the springs, and the sections will slide over them.

What I claim as my improvement, and desire to secure by Letters Patent, is—

The arrangement of the sections A B C and clasps D, as described, in combination with the windlass F, pulleys G H I, rope J, and catches K and L, and springs K' and L', the several parts being constructed and arranged and operated as and for the purpose specified.

ERASTUS SLATER.

Witnesses:

W. H. BURRIDGE,
FRANK ALDEN.