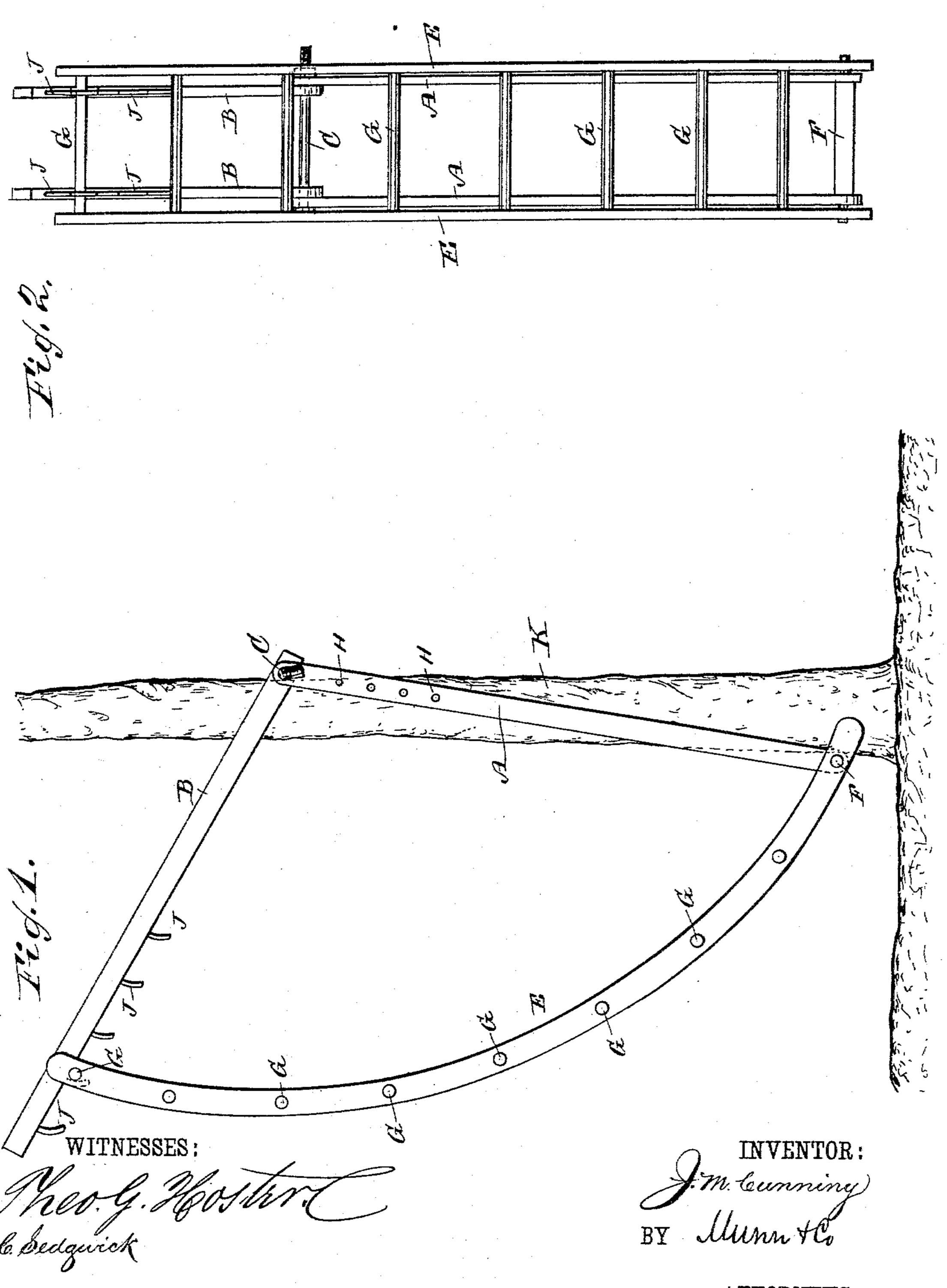
## J. M. CUNNING.

TREE LADDER.

No. 323,641.

Patented Aug. 4, 1885.



## United States Patent Office.

JAMES MONROE CUNNING, OF HASKINS, OHIO.

## TREE-LADDER.

SPECIFICATION forming part of Letters Patent No. 323,641, dated August 4, 1885.

Application filed April 24, 1885. (No model.)

To all whom it may concern:

Be it known that I, James M. Cunning, of Haskins, county of Wood, Ohio, have invented a new and Improved Tree-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 to be used on fruit-trees, and which is so constructed that it can be swung around the tree, and by means of it the outer ends of the branches can be reached.

The invention consists in the combination, with upright bars, of top bars hinged to the upper ends of the uprights, and having hooks projecting from the bottom edges, and of braces pivoted to the lower ends of the bars A and united by rungs.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 is a side view of my improved tree-ladder, and Fig. 2 is a face view of the same.

Two bars, A, are pivoted to two bars, B, by a bolt, C. To the lower ends of the bars A the lower ends of two curved braces, E, are pivoted by a rung, F, and the said braces are united by a series of rungs, G, placed at suit-30 able intervals. From the bottom edge of each bar B a series of hooks, J, project, which are slightly inclined toward the bars A. The bars A are provided with a series of apertures, H, near their upper ends to permit of pivoting 35 the bars B to the bars A of different elevation. A platform may be provided which has longitudinal cleats on the under side, or staples to prevent the platform from slipping, the said platform being adapted to be placed upon the 40 bars B, and the person can stand on the said platform to reach limbs that cannot be reached from any part of the ladder formed by the braces E and rungs G.

The ladder is used in the following manner:
The bottom rung F, which may be loose in the side bars, and may be curved and padded, is placed against the trunk of the tree K, the bolt C is withdrawn, and the ends of the bars A B are placed against the sides of the tree, and the bolt C is then again passed through

the aperture in the crossed ends of the bars A B, the bolt C resting against the tree K on the side opposite the one against which the rung F rests. The braces E are swung more or less toward the tree, according to the in- 55 clination desired, the hooks J resting against the top rung G, and preventing the upper ends of the braces E from swinging outward too far. Instead of resting the bars B on the uppermost rung G, they can be rested on one (o of the lower rungs. The ladder can easily be turned around the tree, and the person on the ladder can easily reach the fruit on the outer ends of the branches. The braces E may be made straight, but I prefer to curve them. 65 The lower ends of the braces E rest against the sides of the tree and prevent swaying of the ladder. If desired, the bolt C may also be curved and padded, so as not to injure the tree.

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

1. In a ladder, the combination, with two upright bars united at their lower ends, and having top bars pivoted to their upper ends, 75 of braces united by rungs and pivoted to the lower ends of the uprights, and of devices for holding the upper ends of the braces to the top bars a greater or less distance from their free ends, substantially as herein shown and 80 described.

2. In a ladder, the combination, with the uprights A, united at their lower ends, of the bars B, pivoted to the upper ends of the bars A by a bolt, C, the downwardly-projecting 85 hooks J on the bars B, and of the braces E, united by rungs and pivoted to the lower ends of the bars A, substantially as herein shown and described.

3. In a ladder, the combination, with the 90 upright bars A, having apertures H, and united at their lower ends, of the bars B, having hooks J, and the braces E, pivoted to the lower ends of the bars A, and united by rungs, substantially as herein shown and described. 95

JAMES MONROE CUNNING.

Witnesses:

D. C. Bemis, George Williams.