H. L. Hall,

Derrick.

No. 104,141. Patented June 14. 1870.

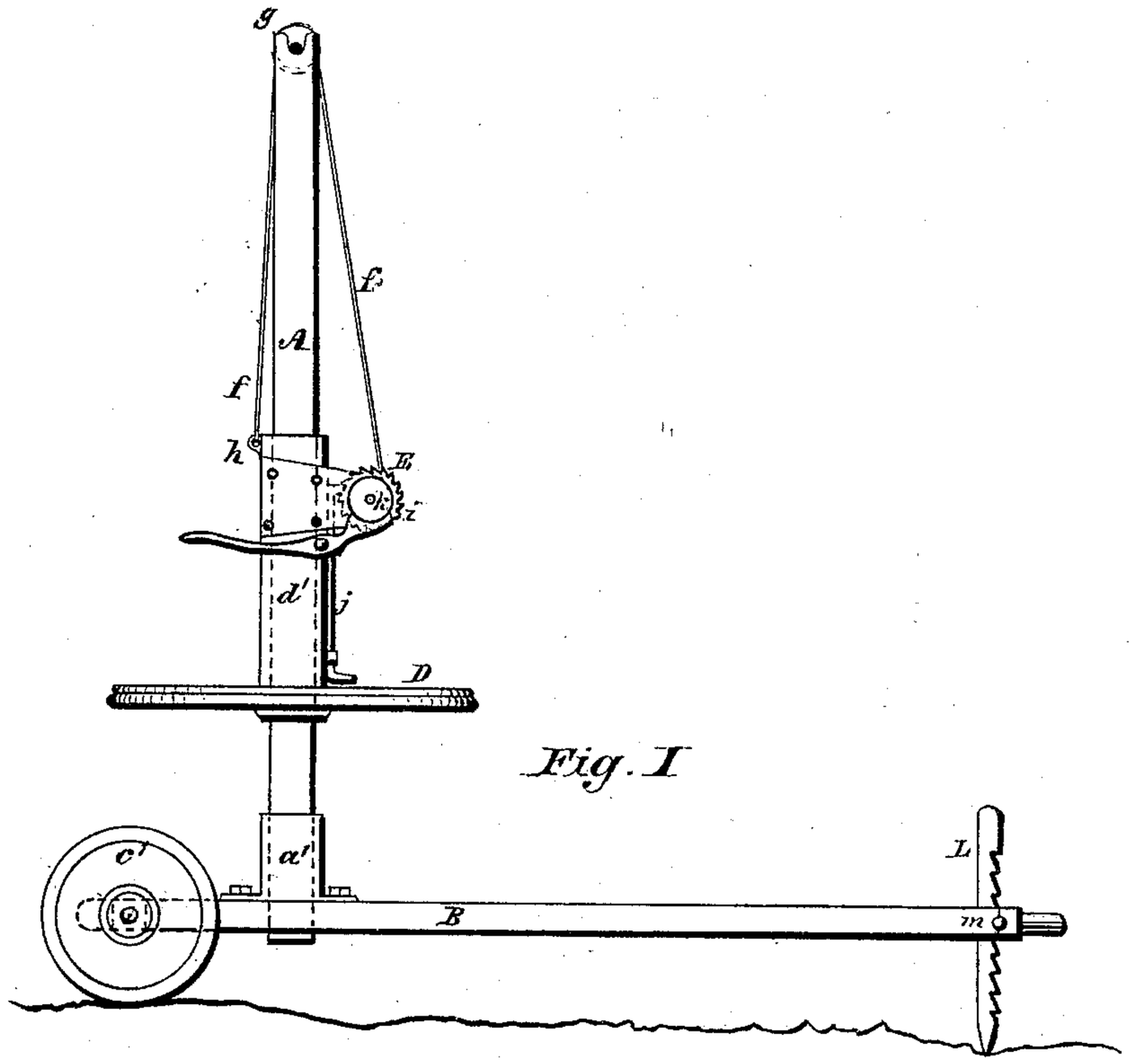

Fig. I

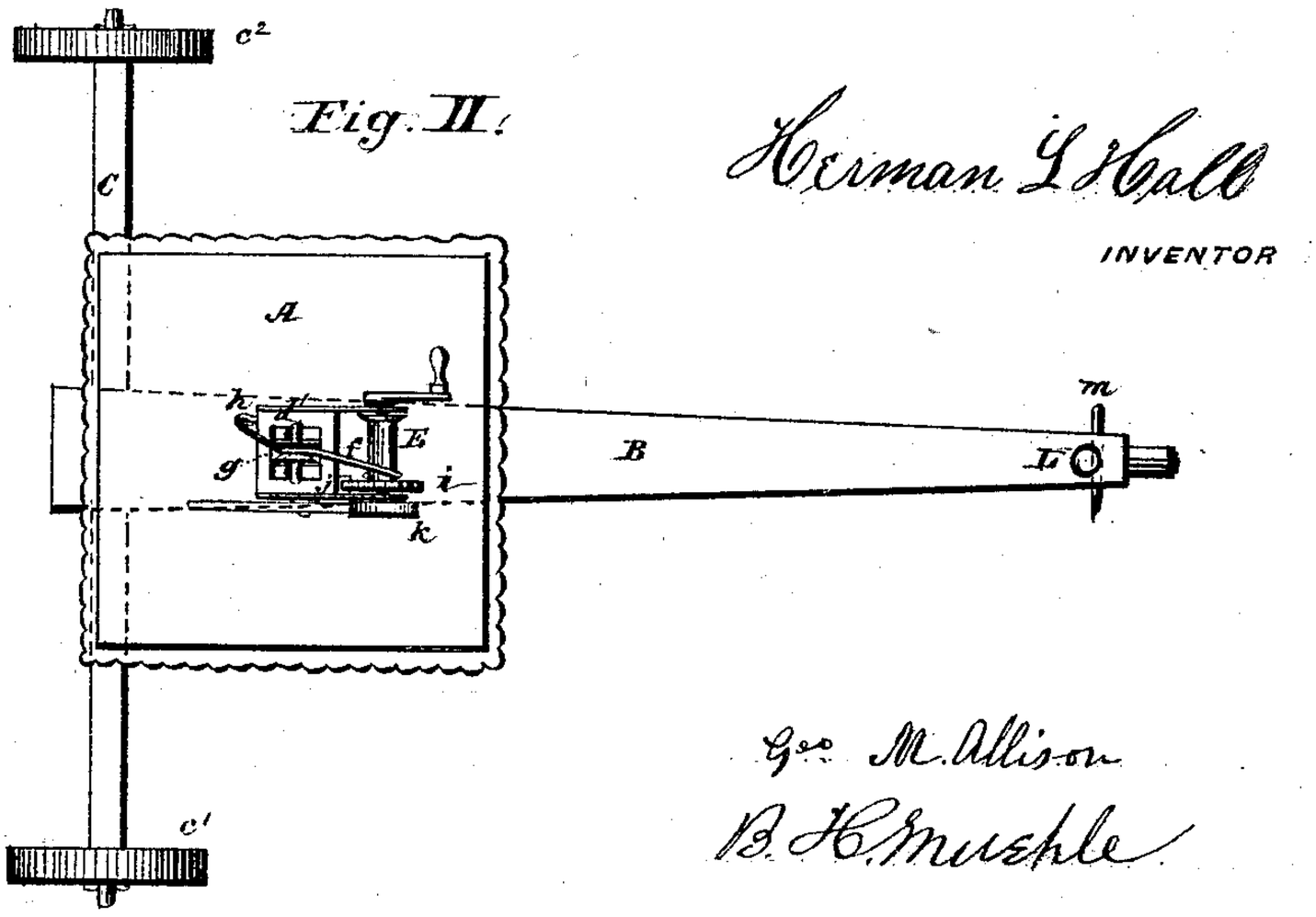

Fig. II.

Herman L. Hall

INVENTOR

Geo. M. Allison

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WITNESSES

United States Patent Office.

HERMAN L. HALL, OF BUFFALO, NEW YORK.

Letters Patent No. 104,141, *dated June* 14, 1870.

IMPROVED PORTABLE SELF-ELEVATOR.

The Schedule referred to in these Letters Patent and making part of the same.

I, HERMAN L. HALL, of the city of Buffalo, in the county of Erie and State of New York, have invented a certain new and improved Portable Self-Elevator for Fruit-Picking, and for other purposes, of which the following is a specification.

My invention relates to the combination and arrangement of an upright timber, supported upon wheels, a platform, constructed so as to slide up and down upon said timber, and a windlass, with necessary stop and break upon the platform, in such manner that a person may step upon the platform, and, by turning the windlass, lift himself or herself up to the extreme height of the upright timber; an apparatus specially designed for fruit-picking in orchards, but which is also admirably adapted for carpenters, painters, plumbers, roofers, and other mechanics whose occupation requires them to reach elevated points upon the outside or inside of buildings and other places; also, for carrying brick and mortar to workmen upon buildings in course of erection, and for many other useful purposes.

In the accompanying drawing—

Figure I is a side elevation of my improved self-elevator.

Figure II is a top plan view.

Letters of like name and kind refer to like parts in each of the figures.

A represents an upright timber, which is supported in the socket a', or otherwise connected to the horizontal timber B, which, together with the axle C and wheels c^1 c^2 thereto attached, forms a very simple carriage, by means of which the timber A may be moved from place to place.

D represents a platform, to the center of which is connected a tube, d', through which the timber A passes, in a manner to permit the platform to slide up and down upon said timber, and to retain the platform in a horizontal position during such up-and-down movement, or at right angles with the timber.

E represents a windlass and crank, secured by brackets to the tube d', within convenient reach of a person standing upon the platform.

A rope, f, connected to the windlass, is passed over a pulley, g, upon the top of the timber A, and down upon the opposite of the timber, and is attached to a staple, h, upon the tube d'.

By turning the crank the rope will be wound upon the windlass barrel, and thereby raise the platform.

i represents a ratchet-wheel upon the windlass, the teeth of which engage with a stop or dog, j, by means of which the platform may be adjusted and held at any desired elevation.

A brake, k, upon the windlass, is so arranged that when the stop j is disengaged from the ratchet-wheel, thereby lowering the platform, the latter may be checked in its descent by means of the brake, and slide down slowly and gradually.

A notched stake, L, is passed through a hole or socket in the extreme end of the timber B, and secured by means of the pin m, so as to hold the timber A upright.

The timber B forms the pole of the carriage.

Horses or other draught animals may be attached thereto, or the carriage moved by hand, as may be most convenient.

The operation of my improved self-elevating apparatus is so simple that it will readily be understood by examining the drawing.

Claim.

I claim as my invention—

The combination and arrangement of the timber A, upon the carriage B C c^1 c^2, the platform D, the windlass E, with stop j and brake k, and the notched stake L, all parts being constructed and operating substantially as described and for the purposes set forth.

HERMAN L. HALL.

Witnesses:

GEO. M. ALLISON,

B. H. MUEHLE.