G. A. MYERS.

Portable and Adjustable Hoisting Apparatus.

No. 140,427. Patented July 1, 1873.

Fig. 1

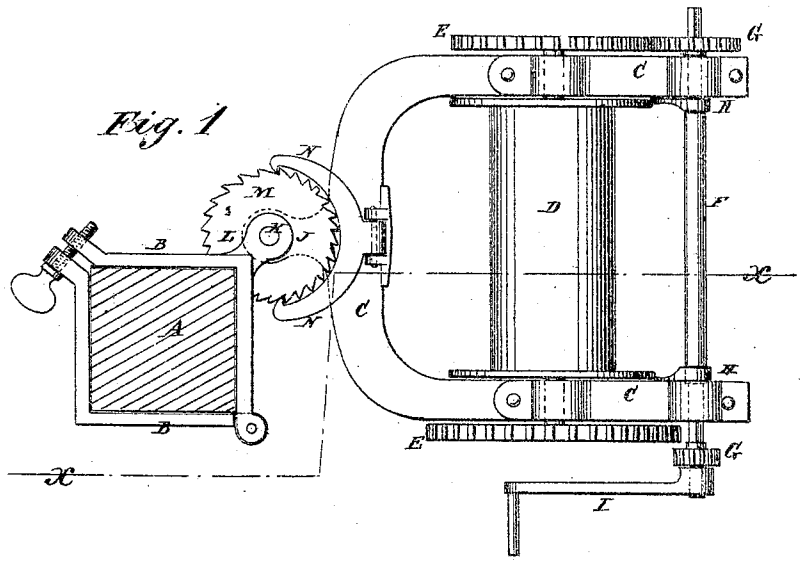
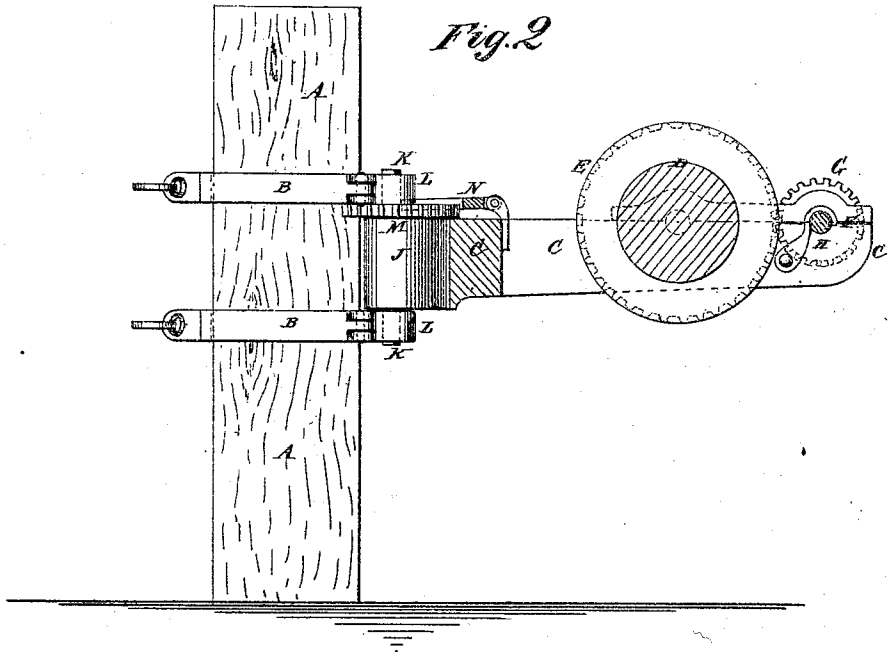


Fig. 2



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE A. MYERS, OF WILLIAMSBURG, NEW YORK.

IMPROVEMENT IN PORTABLE AND ADJUSTABLE HOISTING APPARATUS.

Specification forming part of Letters Patent No. **140,427**, dated July 1, 1873; application filed May 31, 1873.

To all whom it may concern:

Be it known that I, GEORGE ALLEN MYERS, of Williamsburg, in the county of Kings and State of New York, have invented a new and useful Improvement in Portable and Adjustable Hoisting Apparatus, of which the following is a specification:

Figure 1 is a top view of my improved apparatus. Fig. 2 is a side view of the same, partly in section, through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved hoisting apparatus for tiering goods in storehouses, and which shall be so constructed that it may be readily moved from one part of the room to another and swung around to work in any desired position. The invention consists in the clamps, one or more, the ratchet-wheel, and the double pawl, or their equivalents, in combination with the frame, drum, and gearing of a hoisting apparatus, to adapt said apparatus to be detachably and adjustably attached to the stanchions of a storehouse, as hereinafter fully described.

A represents one of the stanchions of the room, to which are attached one or more clamps, B, which are so formed as to fit upon the stanchions A. The clamp or clamps B are hinged at one corner or side of the stanchion A, and are secured at the opposite angle or side by a hand-screw or other convenient fastening, so that the clamp or clamps B can be readily detached from one stanchion and attached to another in some other part of the room. C is a frame, made in U form or other convenient shape, and to which is pivoted the drum D, around which the hoisting-rope is wound, and to the ends of its journals are attached a larger and a smaller gear-wheel, E. In the frame C also works the shaft F, to which are attached a smaller and a larger gear-wheel, G, in such position that when one of the gear-wheels G meshes into one of the gear-wheels E the other pair will be out of gear, so that by sliding the shaft F longitudinally the apparatus may be adjusted to work with speed or power, as may be desired. The shaft F is held in position when adjusted by hooks H pivoted to the frame C, and which drop into grooves in the said shaft F. To the ends of the shaft F are attached the cranks I by which the power is applied. To the frame C is attached or upon it is formed an arm, J, by which it is pivoted by a pin or bolt, K, to lugs L formed upon the clamp or clamps B. The arm J is made with a wide bearing, so that the frame C and its attachments may be held horizontal. This construction enables the frame C to be swung around so as to work in various positions, as may be required in tiering the goods. To the clamp or clamps B is attached a ratchet-wheel, M, upon the teeth of which takes hold the double pawl N, which is hinged or pivoted to the frame C, so that it may quickly and conveniently be thrown into and out of gear with the ratchet-wheel M. The teeth of the ratchet-wheel M and the engaging ends of the pawl N are so formed as to hold the frame C from swinging in either direction.

In using the apparatus the rope from the drum D is passed around the pulley of a block, which is connected with and supported from the joists or rafters by means of a clamp something like an ice-tongs, so that the greater the weight of the package being handled the firmer the said clamp may hold.

With this apparatus the goods may be tiered rapidly and with a comparatively small amount of labor, the apparatus being readily adjusted as the position of the tiers may require.

If desired, the hinge of the clamp or clamps B may be omitted and the two parts connected at both ends by bolts, so that the said clamps may be readily adjusted to stanchions of various sizes.

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

The clamps B, one or more, the ratchet-wheel M, and the double pawl N, or their equivalents, in combination with the frame, drum, and gearing of a hoisting apparatus, to adapt said apparatus to be detachably and adjustably attached to the stanchions of a storehouse, substantially as herein shown and described.

GEO. A. MYERS.

Witnesses:

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