

(No Model.)

F. I. PEARCE.
PACKAGE ELEVATOR.

No. 285,663.

Patented Sept. 25, 1883.

Fig. 1.

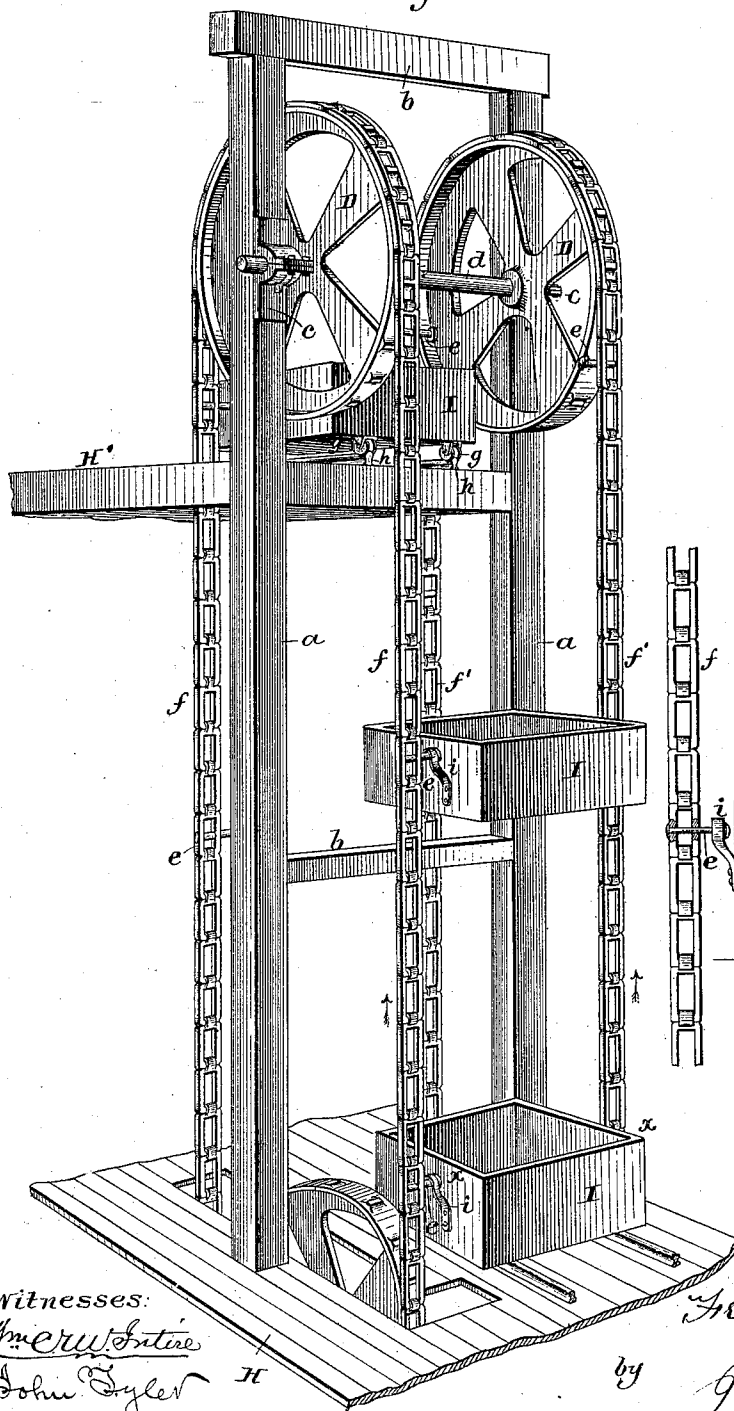
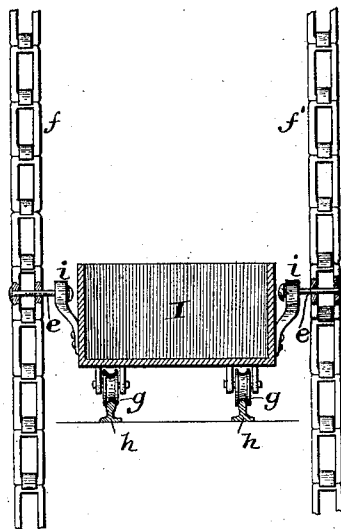


Fig. 2.



Witnesses:
John W. Squire
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Inventor:
Frank I. Pearce
by *J. N. McArthur*
Att'y.

UNITED STATES PATENT OFFICE.

FRANK I. PEARCE, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE LINK-BELT MACHINERY COMPANY, OF SAME PLACE.

PACKAGE-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 285,663, dated September 25, 1883.

Application filed July 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRANK I. PEARCE, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Package-Elevators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this application.

My invention relates to an improved elevator contrivance adapted more especially to the carrying up and down within buildings of freight, &c.; and it consists, essentially, in the novel construction hereinafter more fully explained, and more particularly pointed out in the claims of this specification.

To enable those skilled in the art to make and use my invention, I will now proceed to fully describe the construction and operation of an elevator contrivance embracing my invention carried out in that form in which I have so far successfully practiced it, referring by letters to the accompanying drawings, making part of this specification.

In the said drawings, Figure 1 is a perspective view of a machine embodying my invention; and Fig. 2 is a partial section of the same, taken at the line *x x* of Fig. 1.

In both views the same parts will be found designated by the same letters of reference.

The frame-work of the apparatus consists, simply, of the uprights *a a* and cross-pieces *b b*, to the former of which are hung in suitable journal-boxes, *c*, the axles *d* of the sprocket-wheels *D*. These sprocket-wheels *D* are arranged in pairs apart from each other, and preferably on one axle to each pair, and are located, one set at the head and another set at the foot of the elevator, and are banded together by two drive-chains, *f f'*, as plainly indicated in the drawings. The upper set of wheels may, however, be put on the inner or adjacent ends of two separate axles, so as to avoid the presence of any shaft across the pathway of the moving receptacles *I*.

Projecting inwardly from the chains, and facing each other at points exactly opposite, are studs or pins *e*, which are arranged at suitable distances apart in the lengths of the chains, and which are adapted to engage with handle-

like devices *i* on the boxes or other receptacles *I*, and to elevate and lower said boxes, as will be presently explained. The said handle-like devices *i* are arranged above the centers of gravity of the boxes or other carrying devices, so that the latter will not tip or upset in passing over the axle *d* at the head of the elevator.

To the bottoms of the boxes are attached rollers or wheels *g*, to facilitate in the handling of the boxes and their contents; and tracks *h* may be laid along the floors or platforms *H H'* of the building or other structure, and the boxes so provided with wheels moved thereon.

The flooring or platform *H* covers the space between the sets of chains *f* and *f'* at the bottom of the elevator, as shown, so that the boxes *I* may be rolled or otherwise placed in the proper position to have their handles *i* engaged by the devices on the drive-chains, and the flooring or platform *H* at the upper end of the elevator extends inward, or covers only the space between the descending portions of the chain, so as to permit the box to be carried past this floor in its ascent and to intercept said box in its descent.

The operation of the elevator will be understood to be as follows: Motion being communicated to the sprocket-wheels and chains by any suitable means, located, preferably, below the floor *H*, the chains are driven in the direction, for instance, indicated by the arrows. The boxes *I*, having been loaded, are either rolled or otherwise placed between the ascending portions of the chain, as shown, so that the studs *e* on the chains may engage with the handles or loops *i* of the boxes. An engagement of the said devices having been effected, the box or receptacle is carried up and over the axle or shaft *d* at the head of the machine, and down until it comes onto the floor *H'*, when the studs *e*, ceasing to support the box, pass on down and out of engagement with the handles on the boxes *I*, leaving the box free to be moved along on the floor *H'* to any desired destination. Of course, the direction of the running of the chains and wheels of the apparatus may be reversed, so as to carry the boxes from the floor *H'* down to the floor *H* below.

In practice I purpose, in some instances, using floors or platforms *H H'* having a down-

grade from the machine, so that when the box shall have been released from the chains and deposited on said floor it will automatically roll along on the floor, thus quickly making
5 room for the deposition of the next box brought up or down by the chain.

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

o In combination with suitable chains provided with one or more sets of carrier devices, a box or boxes or other suitable means for transporting the matter to be carried by the

elevator, and provided with handle-like devices, the combination being such, as described, that the engagement of the lifter devices with
15 and their disengagement from the box or other device shall be automatic.

In witness whereof I have hereunto set my hand this 22d day of June, 1883.

FRANK I. PEARCE.

In presence of—

GEO. E. JOHNSON, Jr.,

WILL. P. SISSON.