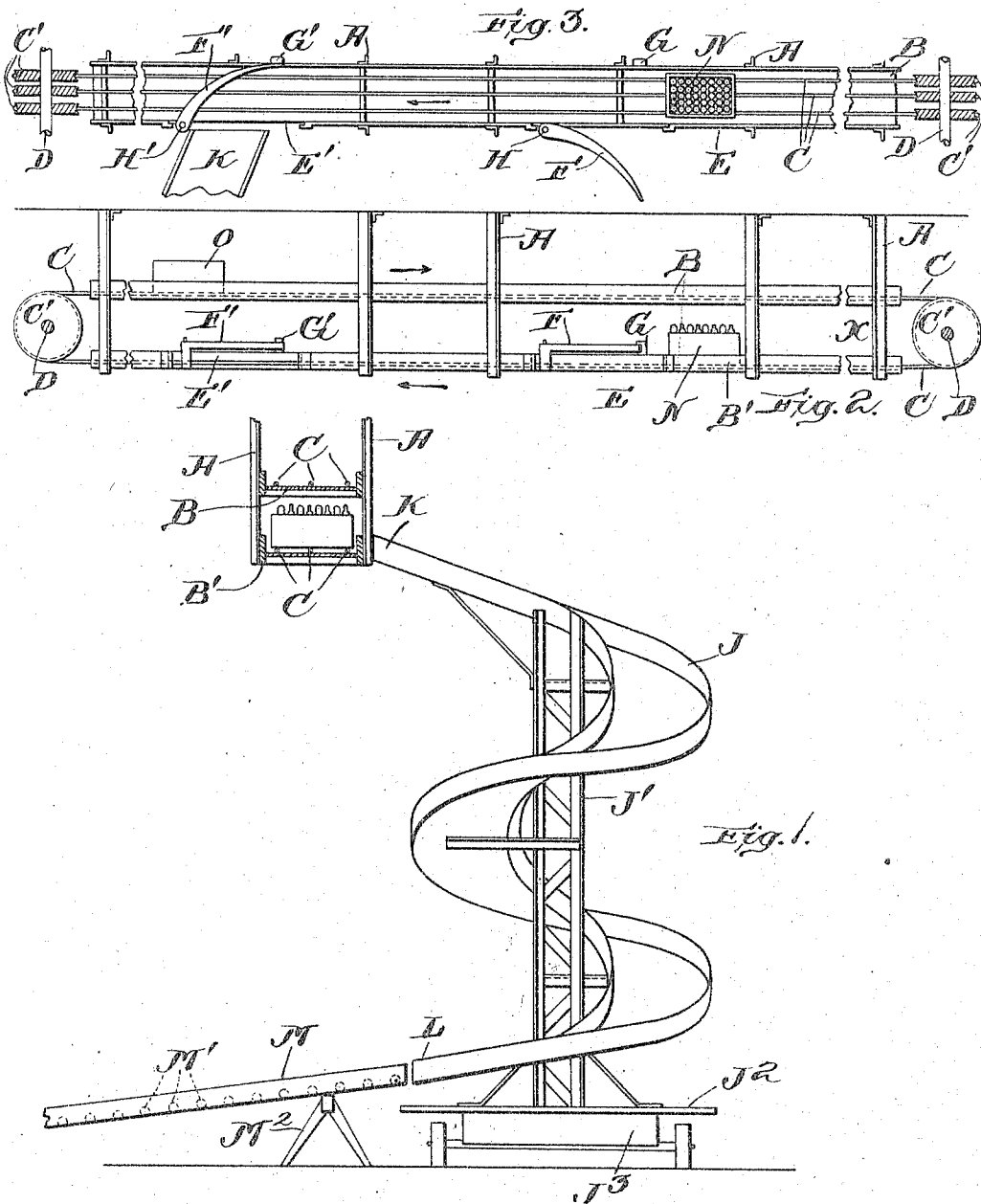


E. G. THOMAS.
CONVEYING APPARATUS.
APPLICATION FILED DEC. 20, 1906.

958,044.

Patented May 17, 1910.



Witnesses:

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UNITED STATES PATENT OFFICE.

EDWARD G. THOMAS, OF BROOKLINE, MASSACHUSETTS, ASSIGNOR TO LAMSON CONSOLIDATED STORE SERVICE COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

CONVEYING APPARATUS.

958,044.

Specification of Letters Patent.

Patented May 17, 1910.

Application filed December 20, 1906. Serial No. 348,757.

To all whom it may concern:

Be it known that I, EDWARD G. THOMAS, of Brookline, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Conveying Apparatus, of which the following is a specification.

My invention relates to improvements in conveying apparatus and has for its object the conveying of cases, boxes or the like from one station to another and also permits the lowering of said cases, etc., for a considerable distance and in a small space without injury to the contents of said cases or allowing them to be upset.

In the accompanying drawings which illustrate a construction embodying my invention, Figure 1 is an elevation partly in section. Fig. 2 is a side elevation of a portion of the apparatus showing the location of switches. Fig. 3 is a plan view of the lower portion of Fig. 2.

Like letters of reference refer to like parts throughout the several views.

A represents hangers suspended from the ceiling and supporting the chutes or guideways B and B' one located above the other.

C represents endless cables mounted at each end of the chutes or guides B by grooved pulleys C' which are rigidly mounted on shafts D. The upper portions of these endless cables C are adapted to travel in and supported by the upper chute B. The lower portions of the cables C are adapted to travel in the opposite direction and supported in the chute B'. The cables may be driven by any suitable power applied to either of the shafts D.

E and E' are openings located in one side of the lower chute or guide B' and of sufficient width to permit the passage of a case or box therethrough.

F and F' are swinging switch arms pivoted at H and H' respectively and adapted to be set in position to switch the cases, etc., through the openings E or E' respectively. In operating or diverting position, these switches are adapted to be held in position by stops G and G'.

J is a spiral chute or guide-way supported by the central framework J' mounted at the bottom on the platform J² which is supported and adapted to be moved at will on the roller truck J³. The upper end K of the spiral chute is adapted to be moved into co-

operation with either of the openings E or E' as desired and at the same time, the lower or discharge end I of said spiral chute or guideway J communicates with an inclined receiving chute M supported by the standard M² at one end, the opposite end resting upon the floor.

The operation is as follows: X represents the central station, and with the cables traveling in the direction indicated by the arrows Fig. 2, the full cases are conveyed upon the lower portions of the cables C within the chute or guideway B' and the empty cases are returned to station X on the upper portions of the traveling cables C within the chute or guideway B. The operator at station X places a full case N in the lower chute B'. The case is conveyed by the traveling cable C in the direction indicated by the arrow toward the openings E and E'. If it is desired to switch the case through the opening E', the switch arm F' is swung inward from the normal position as shown at F until it engages with the stop G'. The spiral chute J is moved with the upper or receiving end K into communication with the opening E' as shown in Figs. 1 and 2, and the case N is diverted by the switch arm F' through the opening E' into the spiral chute J. The case now moves by gravity down the chute J and slides from the lower delivery end L thereof on to the rolls M' in the chute M from thence it slides out upon the floor. If it is desired to expel loaded cases through the opening E, the chute J is moved into communication with said opening E, and the switch arm F is moved inward against the stop G. Empty cases, as represented by O, Fig. 2, are placed within the upper chute or guideway E and are conveyed by the upper portions of the traveling cables C in the direction indicated by the arrow to the station X.

Having thus described the nature of my invention and set forth a construction embodying the same, what I claim as new and desire to secure by Letters Patent of the United States is:

1. In a conveying apparatus, a plurality of elevated or despatching stations, a plurality of corresponding receiving stations located below said despatching stations, movable conveying means adapted to connect any one of said despatching stations independently with a corresponding receiving

station for conveying articles from said despatching to said receiving stations, and a conveyer between the despatching stations.

2. In a conveying apparatus, a plurality
5 of elevated or despatching stations, a plurality of corresponding receiving stations located below said despatching stations, movable conveying means adapted to connect any
10 one of said despatching stations independently with a corresponding receiving station for conveying articles from said despatching to said receiving stations, switches located

at said despatching stations and adapted to be moved into position to divert articles into said movable conveying means, and a conveyer between the despatching stations. 15

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses, this tenth day of December A. D. 1906.

EDWARD G. THOMAS.

Witnesses:

HENRY DOCKER JACKSON,
CHARLES GARRISON.