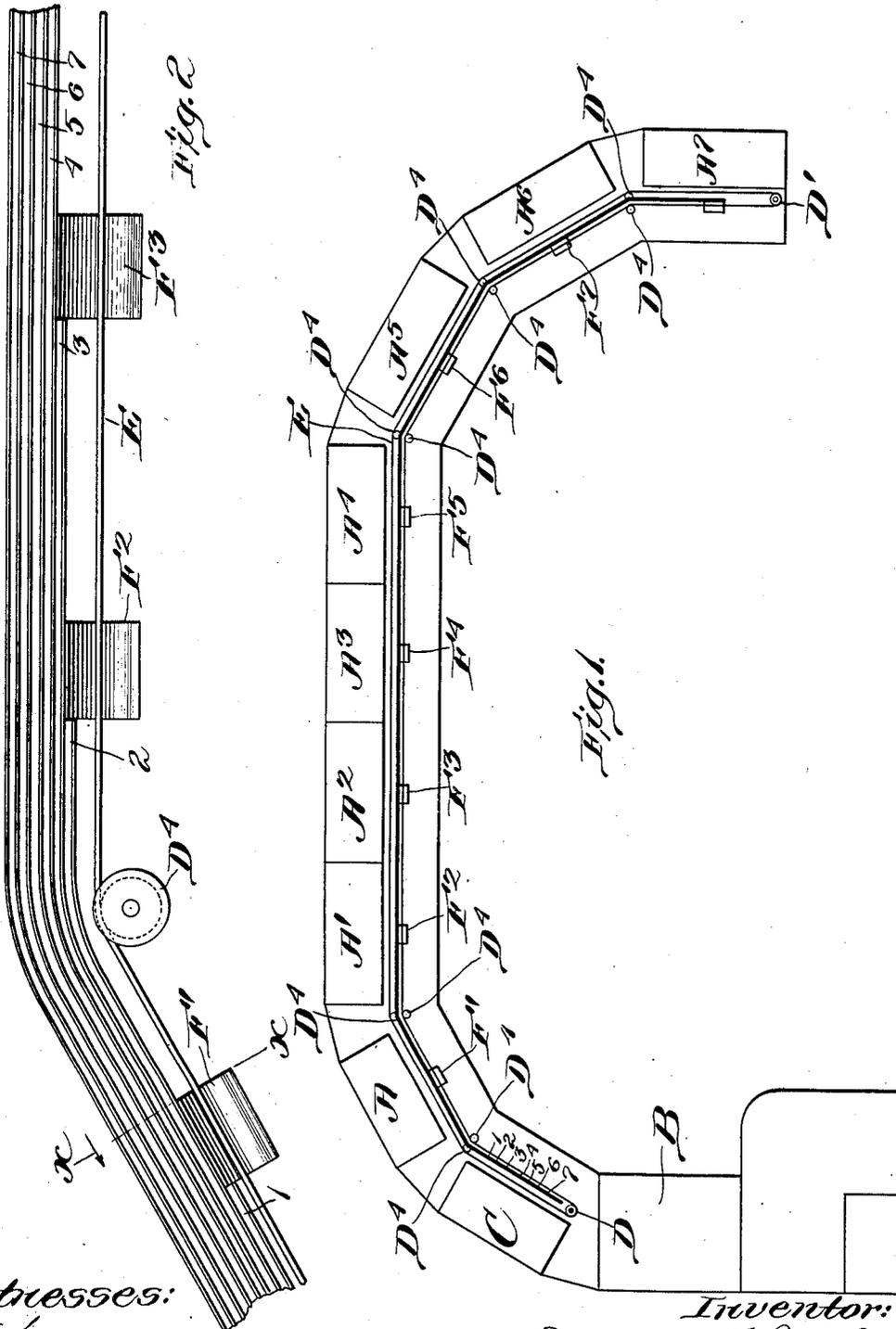


J. T. COWLEY.  
CONVEYING APPARATUS.  
APPLICATION FILED JULY 31, 1905.



Witnesses:  
*F. H. Nussner*  
*L. G. Bartlett*

Inventor:  
*James T. Cowley*  
 by *E. C. Silman & J. H. ...*  
 Attorneys.

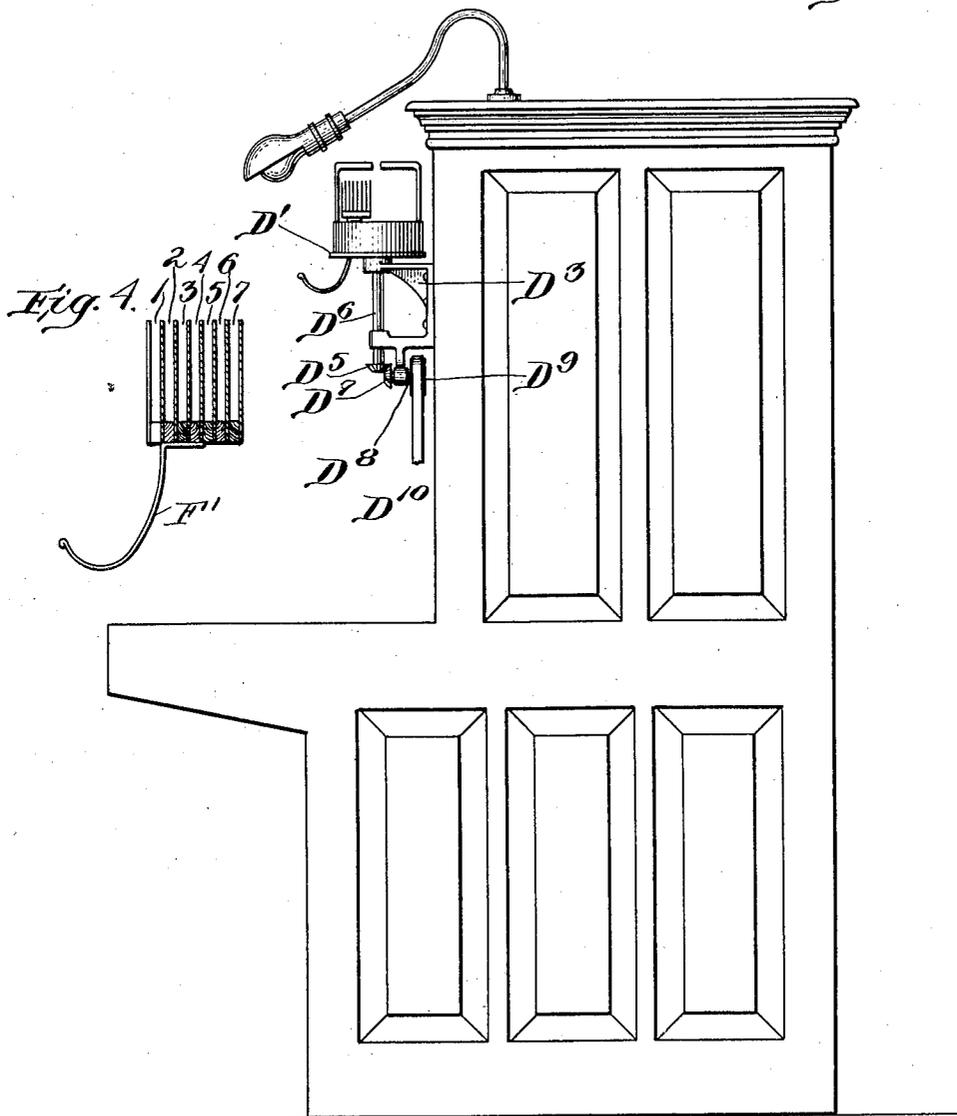
No. 869,350.

PATENTED OCT. 29, 1907.

J. T. COWLEY.  
CONVEYING APPARATUS.  
APPLICATION FILED JULY 31, 1905.

3 SHEETS—SHEET 2.

*Fig. 3.*



*Witnesses:*  
*A. D. Messer*  
*L. G. Bartlett*

*Inventor:*  
*James T. Cowley*  
*by E. L. Lyman*  
*Attorneys.*

J. T. COWLEY.  
CONVEYING APPARATUS.  
APPLICATION FILED JULY 31, 1905.

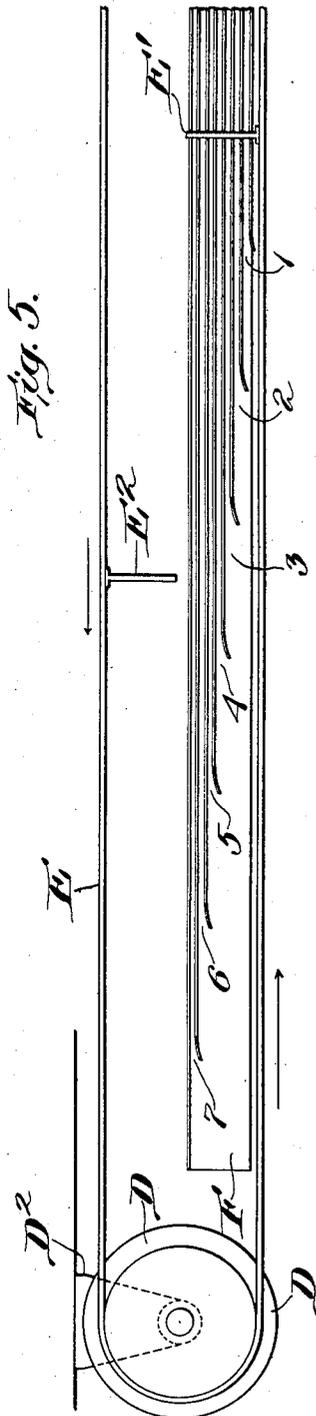


Fig. 5.

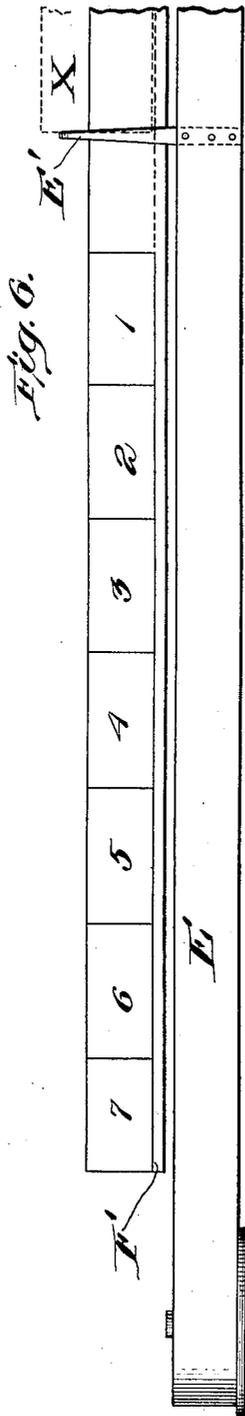


Fig. 6.

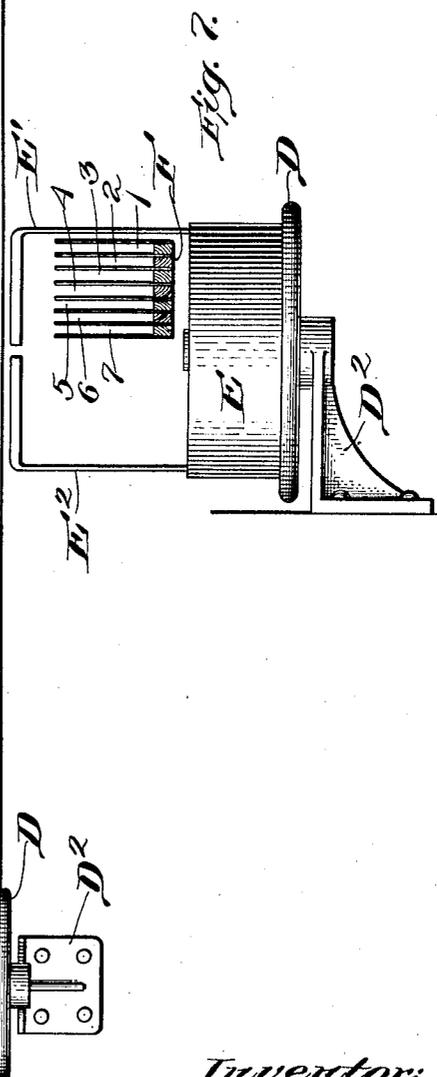


Fig. 7.

Witnesses:  
*A. A. Messer*  
*L. G. Bartlett*

Inventor:  
*James T. Cowley*  
 by *E. C. Kilman*  
*Attorneys.*

# UNITED STATES PATENT OFFICE.

JAMES T. COWLEY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO LAMSON CONSOLIDATED STORE SERVICE COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## CONVEYING APPARATUS.

No. 869,350.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed July 31, 1906. Serial No. 271,883.

To all whom it may concern:

Be it known that I, JAMES T. COWLEY, of Boston, in the county of Suffolk 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 chiefly to that class wherein an endless belt carrying an actuating member is utilized for conveying books, tickets or similar articles along one or a series of channel tracks to a predetermined destination.

In the accompanying drawings which illustrate a construction embodying my invention, Figure 1 is a diagram showing the general arrangement of the device. Fig. 2 is an enlarged portion of Fig. 1 showing receiving shelves. Fig. 3 is an end view of desk showing receiving shelf. Fig. 4 is a sectional view on the line  $x-x$  Fig. 2 looking in the direction indicated by the arrow. Fig. 5 is a plan view of a despatching station. Fig. 6 is a side elevation of parts shown in Fig. 5. Fig. 7 is an end view of parts shown in Fig. 6.

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

B represents a counter and A, A', A<sup>2</sup>, A<sup>3</sup>, A<sup>4</sup>, A<sup>5</sup>, A<sup>6</sup> and A<sup>7</sup> are desks or receiving stations located on said counter.

C represents the central or despatching station.

The flanged pulleys D and D' are rotatably mounted on the horizontal supports D<sup>2</sup> and D<sup>3</sup> respectively and carry the endless belt E mounted thereon. The flanged idle pulleys D<sup>4</sup> support the belt E at the turns and are mounted on similar supports to D<sup>2</sup> and D<sup>3</sup>. The pulley D' is driven by means of the bevel gear D<sup>5</sup> fixed to the shaft D<sup>6</sup> rotatably mounted in an extension of the horizontal support or bracket D<sup>3</sup>. The bevel gear D<sup>7</sup> intermeshes with said bevel gear D<sup>5</sup> and is fixed to the shaft D<sup>8</sup> to which is also fixed the pulley D<sup>9</sup> driven by the belt D<sup>10</sup>. Any suitable power may be utilized to drive the belt D<sup>10</sup>.

The tracks or ways 1, 2, 3, 4, 5, 6 and 7 consist preferably of thin strips of metal equally spaced upon and vertically supported by the base F. Each channel track terminates consecutively at a desk or receiving station and under each open terminal is placed a shelf F', F<sup>2</sup>, F<sup>3</sup>, F<sup>4</sup>, F<sup>5</sup>, F<sup>6</sup> and F<sup>7</sup> adapted to receive the articles.

The belt E carries the finger or angular members E' and E<sup>2</sup> fixed thereto, the upper portion of which are adapted to clear and sweep over the top of the channel tracks pushing the articles contained therein until they reach their destination.

The operator stationed at the central or despatching desk C places the articles X (such as books or tickets) in

the opening in the channel tracks bearing a number corresponding to the station or desk to which the articles X are consigned. The next push bar carried by the belt E traveling in that direction engages the said article X, which article is moved along the channel track until arriving at the predetermined desk or station, it drops through the open terminus of said channel track and upon the shelf located thereunder to receive it. Fig. 6 shows the article X being moved to its destination by the push bar E'. Any number of similar push bars may be fixed at intervals to the belt E.

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 channel track or way, means for permitting the insertion of articles into said channel track or way, propelling means for engaging said articles above said channel track or way and for moving said articles along the same, and means for receiving said articles from said channel track or way.

2. In a conveying apparatus, a plurality of channel tracks or ways, means for permitting the insertion of articles into said channel tracks or ways, propelling means for engaging said articles above said channel tracks or ways and for moving said articles along the same, and means for receiving said articles from said channel tracks or ways.

3. In a conveying apparatus, a channel track or way, means for permitting the insertion of articles into said channel track or way, an endless belt or cable, means located on said belt or cable for engaging said articles above said channel track or way and for moving said articles along the same, and means for receiving said articles from said channel track or way.

4. In a conveying apparatus, a plurality of channel tracks or ways, means for permitting the insertion of articles into said channel tracks or ways, an endless traveling belt or cable, projecting means located on said belt or cable for engaging and moving said articles along said channel tracks or ways, and means for receiving said articles from said channel tracks or ways.

5. In a conveying apparatus, a channel track or way, means for permitting the insertion of articles into said channel track or way, an endless traveling belt or cable, a plurality of means located on said belt or cable adapted to engage said articles above said channel track or way and to move said articles along the same, and means for receiving said articles from said channel track or way.

6. In a conveying apparatus, a plurality of channel tracks or ways, means for permitting the insertion of articles into said channel tracks or ways, an endless traveling belt or cable, a plurality of means located on said belt or cable and adapted to engage and move said articles along said channel tracks or ways, and means for receiving said articles from said channel tracks or ways.

7. In a conveying apparatus, an endless belt or cable, pulleys mounted in suitable bearings supporting said endless belt or cable, means for driving said belt or cable, a plurality of channel tracks or ways located within the path of travel of said belt or cable, a receiving shelf or station located at the open terminus of each channel track

or way, means for permitting the insertion of articles into said channel tracks or ways, actuating means carried by said belt or cable and adapted to engage and move said articles to their predetermined destination or receiving shelf.

5 8. In a conveying apparatus, a channel track or way into which articles are placed for transmission, a traveling belt or cable, means located on said belt or cable adapted to engage said articles above said track or way and to

move said articles along the same, and means for receiving said articles from said channel track or way. 10

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses, this 28th day of July A. D. 1905.

JAMES T. COWLEY.

Witnesses:

WILLIAM WILCOX,  
WM. A. EVANS.