

No. 873,633.

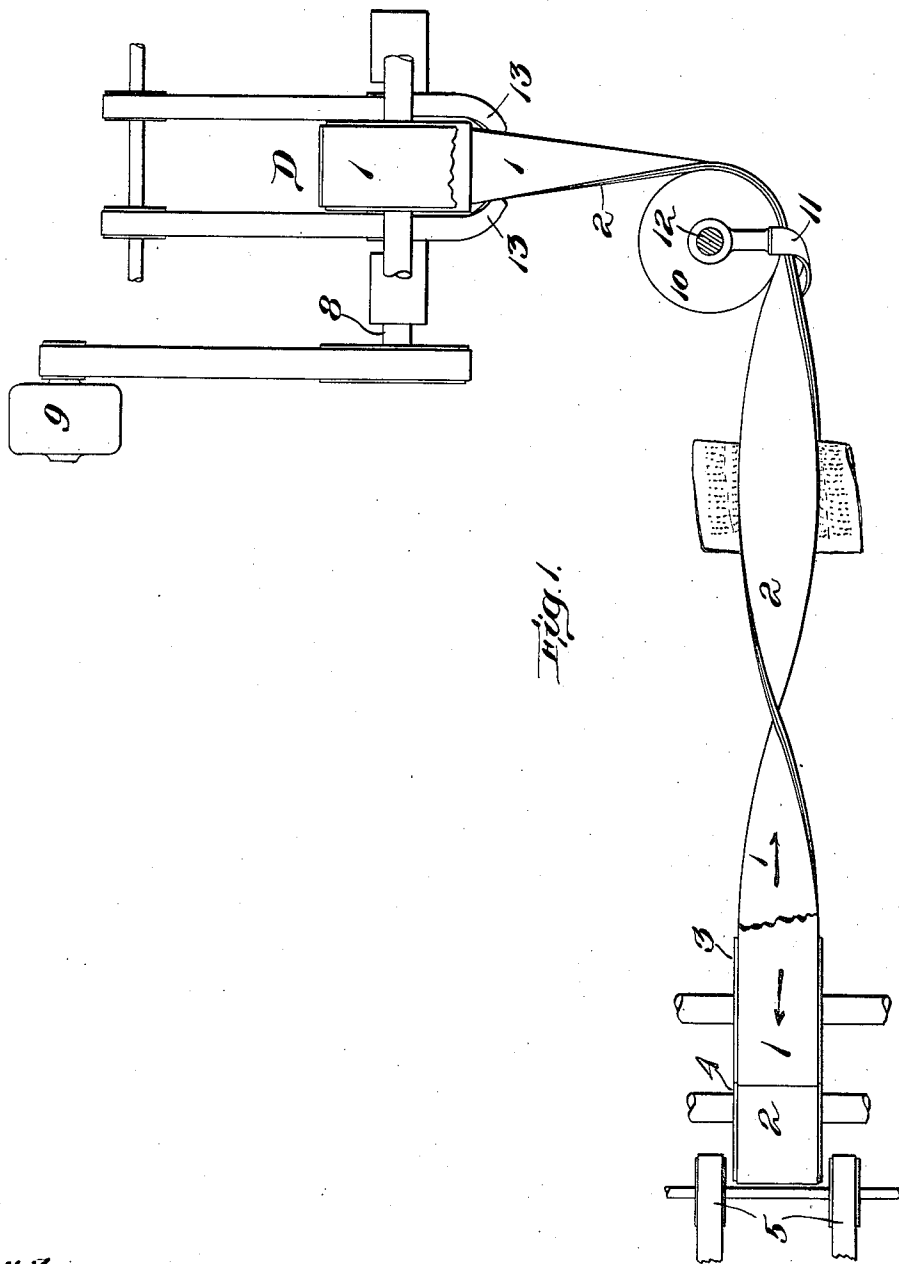
PATENTED DEC. 10, 1907.

E. G. THOMAS.

CONVEYER FOR NEWSPAPERS AND THE LIKE.

APPLICATION FILED-SEPT. 19, 1906.

3 SHEETS—SHEET 1.



Witnesses:

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L. G. Bartlett

Inventor:

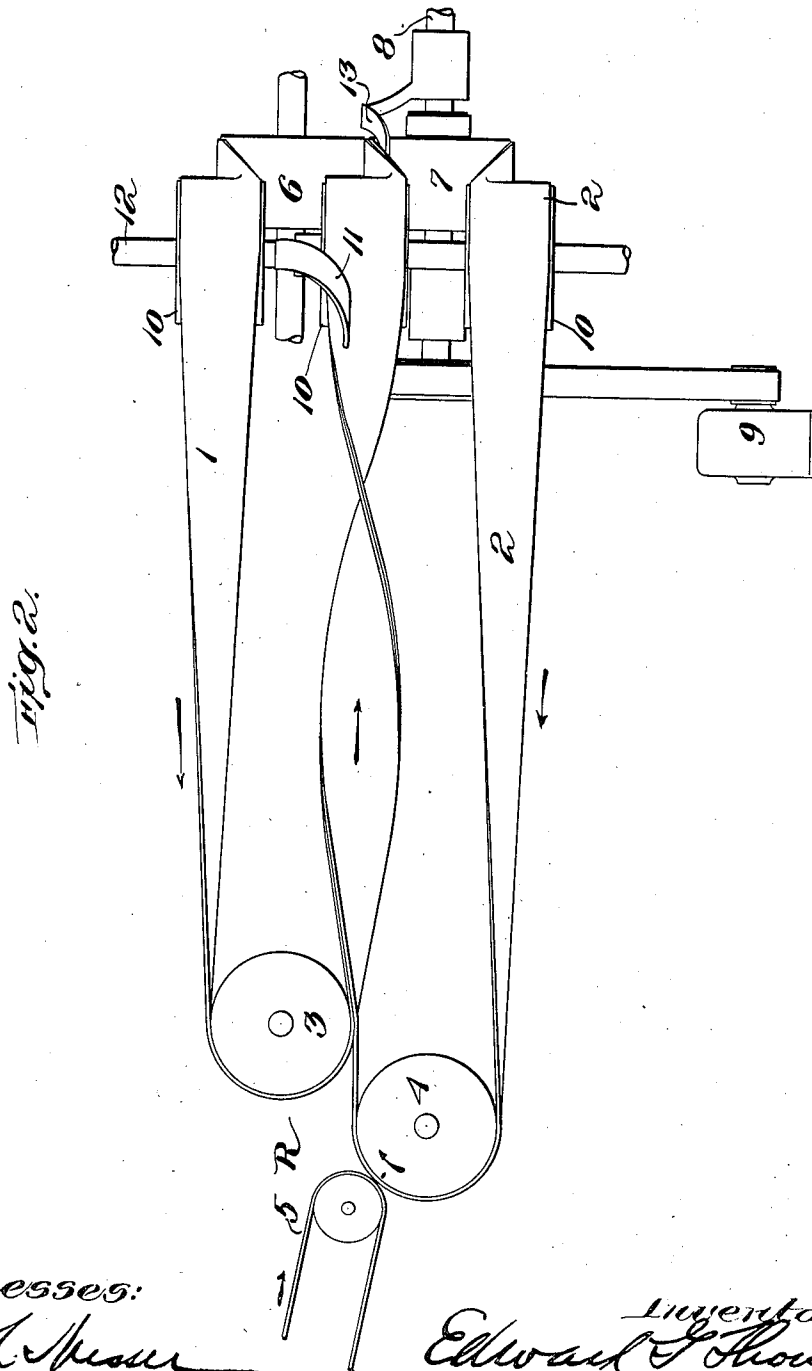
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3 SHEETS—SHEET 2.



Witnesses:

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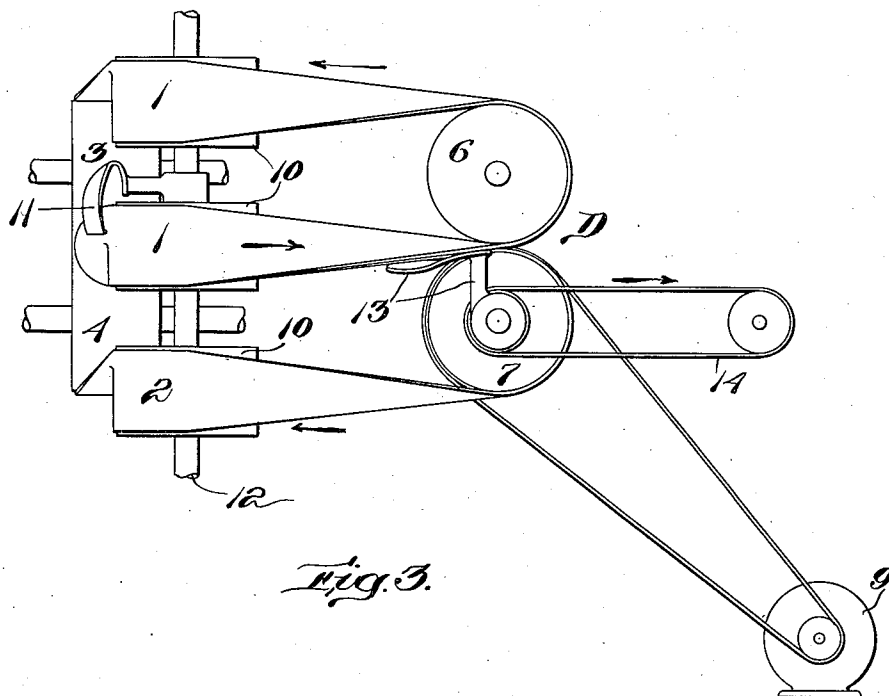
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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

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

CONVEYER FOR NEWSPAPERS AND THE LIKE.

No. 873,633.

Specification of Letters Patent.

Patented Dec. 10, 1907.

Application filed September 19, 1906. Serial No. 335,230.

To all whom it may concern:

Be it known that I, EDWARD G. THOMAS, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Conveyers for Newspapers and the Like, of which the following is a specification.

My invention relates to improvements in conveyers for newspapers and the like, and its object is to so position and operate endless traveling belts that articles such as newspapers and the like may be securely gripped and conveyed between adjacent and like directionally moving portions of the belts.

Another object is to enable newspapers or articles of great width to be conveyed by narrow belts by providing guides and deflectors for preventing the projecting portions from being crumpled especially at the bends.

In the accompanying drawings which illustrate a construction embodying my invention, Figure 1 is a plan view of my improved conveyer. Fig. 2 is a front elevation of the same, Fig. 3 is a view on the right hand end of the conveyer shown in Fig. 1.

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

In the drawings the conveyer is shown adapted to take newspapers as they are delivered from the press and deliver them to some distant part of the building, as for instance, the mailing room, but it is evident that the conveyer may be used in any place where it is desired to carry sheets of any material from one point to another.

The conveyer consists of two endless belts 1 and 2 arranged side by side. At the receiving end R the belts 1 and 2 run respectively over two pulleys 3 and 4. It is preferable to have the lower pulley 4 in advance of the upper pulley 3 (Fig. 2) so as to have a surface upon which to lay the papers as the press delivery 5 delivers them to my apparatus. At the delivery end D of my conveyer, the belt 1 is supported by a pulley 6 and the belt 2 by a pulley 7. The adjacent sides of the two belts are twisted together as illustrated, the lower belt 2 driving the upper belt 1 by the friction of the twisted surfaces. The pulley 7 is secured to a shaft 8 and the driving power is applied to one end of the shaft from any suitable source. A motor 9 is shown belted to the shaft 8.

It is desirable in all conveyers to be able

to run them in different planes, *i. e.*, either vertically or horizontally or at any desired angle. This conveyer is illustrated as running in two planes, the bend between the two planes being effected by means of the usual idle pulleys 10. It is obvious that by using other idle pulleys similar to the pulleys 10 it is possible to run this conveyer into any plane.

In order to economize in the width of the belt, there is provided guide pieces to be placed so as to support the free or projecting edges of the paper as the latter travels around the various bends as hereinafter described to prevent them from bending or jamming.

At the vertical turn of the conveyer, as shown in Fig. 1, there is provided a guide piece 11 fixed to the shaft 12 bent in such a form as to engage the upper edge of the newspaper before it reaches the pulleys 10 and gradually to bring it to an upright position so that it will pass around said pulley without jamming. Obviously guide pieces bent into a proper form may be employed when the bend is at an angle other than vertical. At the delivery end D there are other guide pieces or supports 13 which project forward and bring the edges of the newspaper into line with the part which is gripped between the belts before the paper is directly between the pulleys. These guide pieces 13 are fixed to the bearing of the shaft 8 or from any other convenient fixed support.

As the newspaper leaves the conveyer at the delivery end D it is dropped upon a more slowly moving belt or belts 14 from whence it may be taken by hand.

By the use of this improved conveyer it is possible to do away to a great extent with rolling supports which are necessary in other forms of belt conveyers; it will be unnecessary to use them at all except on long horizontal distances. The width of the belts may be greatly reduced over the width of the papers or articles to be conveyed as the guide pieces hereinbefore described will support nearly one-half of the paper which may project beyond the belts.

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 belt conveyer, two endless travel-

ing belts having one or more twists in their adjacent portions which move in the same direction for the purpose of gripping and conveying articles such as newspapers and the like.

2. In a belt conveyer of the class described comprising two endless belts side by side and adapted to grip a paper or the like between them, and stationary means at the bends in said belts to support the projecting edges of the paper or the like.

3. In a belt conveyer of the class described comprising two endless belts side by side adapted to grip a paper or the like between them, and deflectors at the bends in said belts for supporting the projecting edges of the paper or the like and prevent jamming or clogging.

4. In a belt conveyer of the class described comprising two endless belts side by side adapted to grip a paper or the like between

them, and deflectors at the bends in said belts arranged in the path of the projecting edges of the paper or the like adapted to support said edges and prevent jamming or clogging.

5. In a belt conveyer of the class described comprising two endless belts side by side twisted so as to grip a paper or the like between them, and deflectors at the bends in said belts and in the path of the projecting edges of the paper for supporting said edges and preventing clogging.

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

EDWARD G. THOMAS.

Witnesses:

HOWARD C. FORBES,
CHARLES GARRISON.