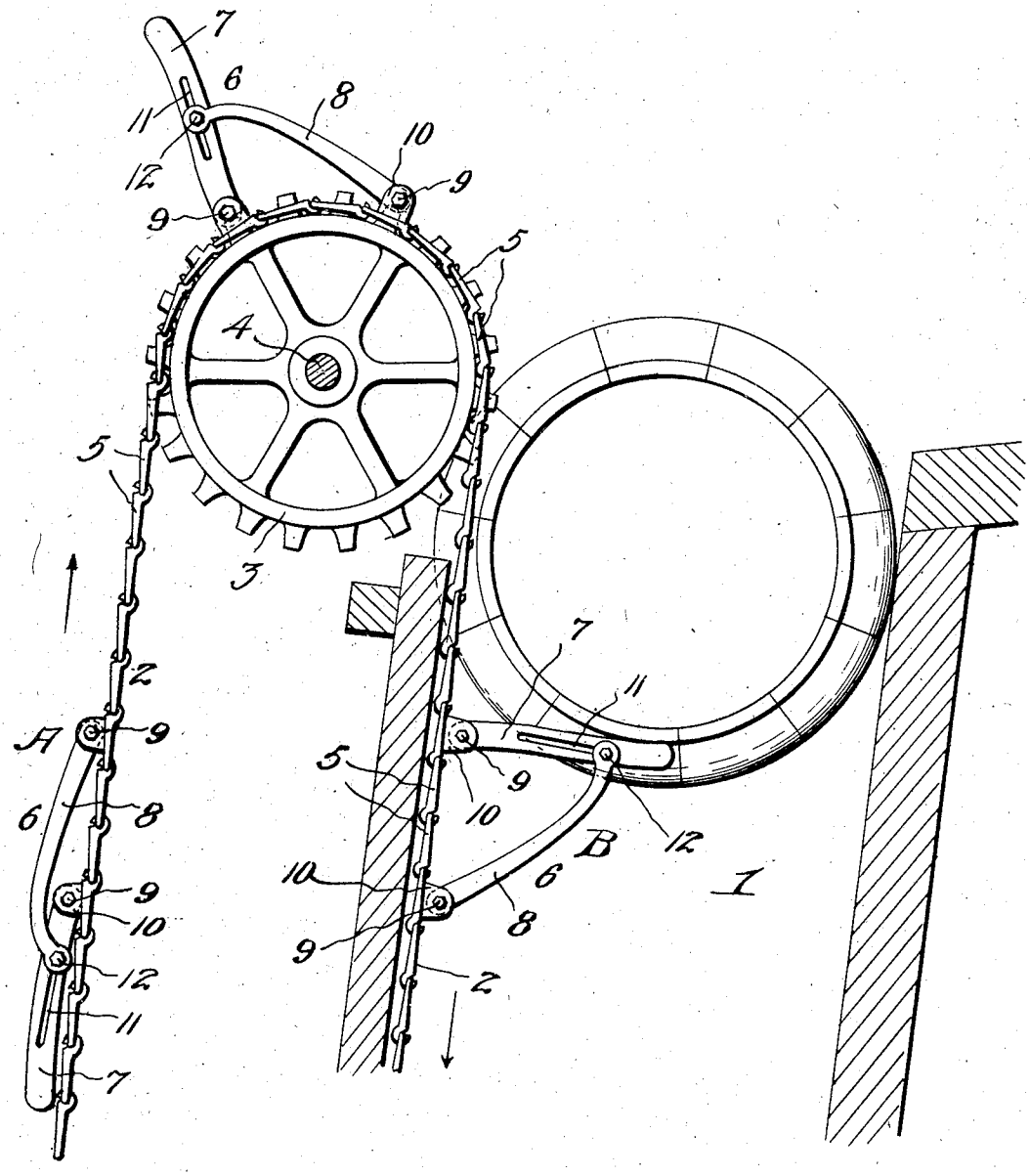
No. 791,601. PATENTED JUNE 6, 1905.

R. M. ANDRUS.

ENDLESS CONVEYER.

APPLICATION FILED NOV. 22, 1904.



Witnesses:
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No. 791,601. Patented June 6, 1905.

UNITED STATES PATENT OFFICE.

RALPH M. ANDRUS, OF CHICAGO, ILLINOIS.

ENDLESS CONVEYER.

SPECIFICATION forming part of Letters Patent No. 791,601, dated June 6, 1905.

Application filed November 22, 1904. Serial No. 233,794.

To all whom it may concern:

Be it known that I, RALPH M. ANDRUS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Endless Conveyers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in endless conveyers, and more particularly to that class of such devices used for lowering barrels or the like from an upper to a lower floor of a building.

The object of my invention is to provide a simple and efficient device of this character in which the barrel-supporting arms upon the chain or other endless carrier are mounted so as to fold up against the same when they strike an obstruction or when the passage through which the barrels are lowered becomes blocked.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawing I have shown a detail vertical sectional view through the upper portion of a barrel conveyer or elevator constructed in accordance with my invention.

Referring to the drawing by numeral, 1 denotes an elevator well or passage leading from one floor of a building to another and through which barrels, boxes, or other packages are to be lowered, and 2 denotes an endless conveyer, here shown in the form of a sprocket-chain. One or more of these conveyer-chains 2 may be provided, as desired, and they are passed over sprocket-wheels 3 upon suitably-mounted shafts 4. At suitable intervals along the chain 2, which is composed of links 5 of well-known form, are mounted folding supports 6, upon which the barrels or the like are supported while being lowered through the well or passage 1. Each of said folding supports 6 consists of a swinging arm 7 and a swinging brace 8 for said arm. The inner end of each of said arms and braces is pivotally mounted by means of a bolt or the like 9 upon apertured ears 10, which are preferably formed integral with one of the links 5 of the chain 2. The outer portion of the arm 7 is formed with a longitudinally-disposed slot 11, in which is slidably mounted by means of a bolt or the like 12 the outer end of the brace 8 in order that said arm and brace may fold against the conveyer-chain when necessary. When the conveyer-chain 2 is in motion, the supports 6 will assume a folded position, as shown at A, on the up-stretch of the conveyer and an open or extended position, as shown at B, upon the down-stretch of the conveyer in order to support a barrel or the like. At the lower end of the conveyer said supports will fold by gravity, and at the upper end of the same they will open automatically, as shown.

It will be seen that by mounting the supporting-arms 7 so that they will fold up against the conveyer-chain when they meet an obstruction in the well or passage 1 there will be little or no danger of their becoming broken should the passage 1 become blocked by reason of the failure of the barrel to discharge from the lower end of the passage or for any other cause. Hence it will be unnecessary to have a man to watch the receiving end of the passage or well to prevent a blockade, since even if the passage should become blocked no injury will result to the conveyer. It will also be noted that since the supports assume a folded position upon the up-stretch of the conveyer the latter will occupy less space than would be the case if the supports or arms were rigid.

From the foregoing description, taken in connection with the accompanying drawing, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what

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

1. In an endless conveyer, the combination with a chain or other movable flexible element, of a support pivotally mounted thereon, a brace pivotally mounted upon said chain or other element and slidably engaged with said support, substantially as described.

2. In an endless conveyer, the combination with a chain or other movable flexible element, a supporting-arm pivotally mounted thereon and formed with a slot, of a brace having one end pivotally mounted upon said chain or element and its other end slidably mounted in said slot in said arm, substantially as described.

3. In an endless conveyer, the combination of a chain consisting of a plurality of links, some of which are formed with ears, of a supporting-arm pivotally mounted upon one of said ears and formed with a longitudinal slot, and a brace pivotally mounted upon another of said ears, and slidably engaged with the slot in said arm, substantially as described and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

RALPH M. ANDRUS.

Witnesses:
W. M. BURTON,
B. PARKS.