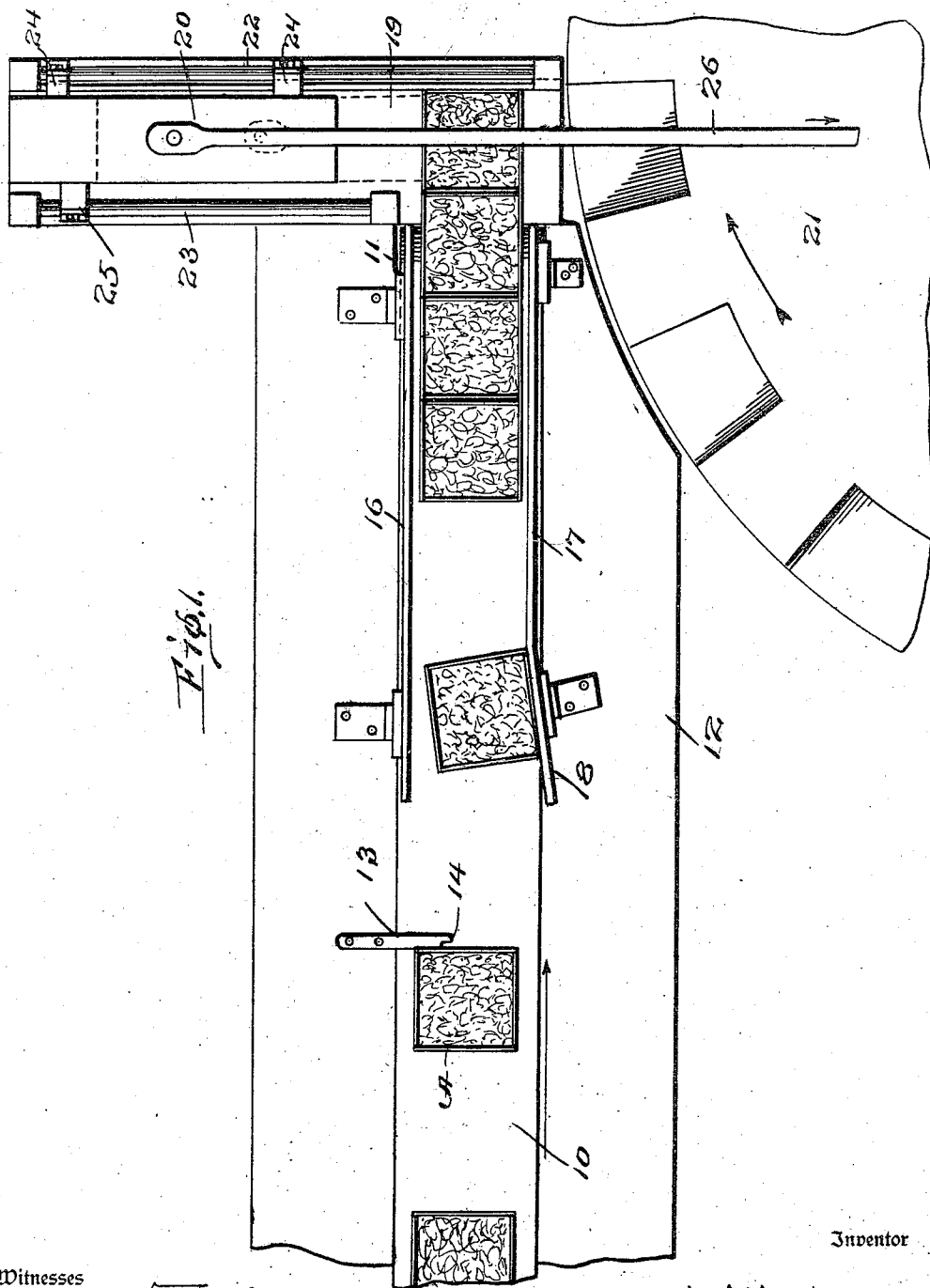


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W. L. MONTGOMERY.
CONVEYING AND FEEDING MECHANISM.
APPLICATION FILED JULY 19, 1911.

1,028,766.

Patented June 4, 1912.



Witnesses

J. W. Fowler
L. Morril

Inventor

Walter L. Montgomery
By *Mason Smith Lawrence*,
Attorneys

UNITED STATES PATENT OFFICE.

WALTER L. MONTGOMERY, OF CHICAGO, ILLINOIS.

CONVEYING AND FEEDING MECHANISM.

1,028,766.

Specification of Letters Patent.

Patented June 4, 1912.

Application filed July 19, 1911. Serial No. 639,331.

To all whom it may concern:

Be it known that I, WALTER L. MONTGOMERY, 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 Conveying and Feeding Mechanism; and I do hereby 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.

This invention relates to conveying and feeding mechanisms and has for an object to provide a device especially for use in conveying and feeding cartons to a sealing machine.

An object of the invention is to provide a belt conveyer adapted to convey unsealed cartons and with means adjacent the conveyer belt for turning the cartons one-fourth of a revolution.

A further object of the invention is to provide a reciprocating plunger mechanism adapted to discharge one carton at a time from the conveyer mechanism onto a sealing machine.

With these and other objects in view the invention comprises certain novel constructions, combinations and arrangements of parts as will be hereinafter more fully described and claimed.

In the drawings the figure is a top plan view of the device showing a fragment of a rotating table to represent a top sealing device and a fragment of the conveyer supporting mechanism.

Like characters of reference indicate corresponding parts throughout the several views.

A belt conveyer 10 is mounted in any usual well known manner, as passing over the roller 11 mounted upon a base 12. The belt conveyer in the specific embodiment of the present invention is intended to receive filled cartons from a carton filling machine and to convey and feed such cartons to a top sealing machine. As the cartons are received from the filling machine they are not properly positioned to be operated upon properly by the top sealing machine. That is, the top flaps are not properly positioned to be correctly folded down by the mechanism of the folding machine but a quarter

turn of such carton is required to place such carton in position to be acted upon properly by the top sealing machine. For the purpose of turning such carton, a finger 13 is secured to the base 12 and projects over the conveyer belt 10. The finger is also provided with a nose 14 and the initial shoulder 15. As the carton A moves in the direction indicated by the arrows, it first engages the finger 13 and the advancing movement of the belt causes the carton to turn about the initial shoulder 15 and to engage the nose 14. The engaging of the shoulder 15 being removed from the middle of the belt produces a leverage upon one side of the carton which causes it to swing, while the position of the nose extending substantially half way over the belt causes the carton to turn a complete quarter revolution.

At the sides of the belt 10 guides 16 and 17 are erected, the latter having its end, as 18, bowed outwardly, to replace the carton upon the belt if such carton is left partially extended over one side of such belt.

The cartons being properly turned by the finger 13 and moved onward by the belt 10, are discharged upon the ledge 19 of the feeding mechanism, the several cartons being piled one against the other as they are fed up by the belt. The feeding mechanism comprises a plunger 20 of such proportion as to engage against a single one of the cartons, as indicated in dotted lines, and to move such single carton in the direction indicated by the arrow into engagement with the top sealing machine which is indicated conventionally at 21. The plunger 20 is mounted to reciprocate by being disposed between guide bars 22 upon one side and 23 upon the opposite side and having bearing ears 24 slidably engaged upon the rods 22 and similar ears 25 slidably engaged upon the rods 23. A pitman rod 26 is provided connected with any approved source of power which moves in timed relation to the top sealing machine 21 so that the cartons are discharged from the ledge 19 upon such top sealing machine in proper timed relation. It will be apparent then that cartons deposited upon the belt 10 from any approved source, as the filling machine, will be advanced into engagement with the finger 13 and there receive a quar-

ter turn and be further advanced to and discharged upon the ledge 19 to be engaged by the plunger 20 and move at right angles to the path of movement of the belt upon the end sealing machine 21.

I claim:—

1. The combination with a movable member, of a finger extending above and partially across said movable member, said finger being formed with a notch at its outer end defining an initial shoulder against which an article placed upon said movable member is adapted to strike, and a shoulder portion adapted to engage said article after the same has been partially turned for completing the turning movement thereof, and means arranged adjacent said movable member for replacing said article on said movable member.
2. The combination with a movable belt, of a finger secured rigidly at one side of the belt and extending substantially perpendicular thereto and adjacent the center of said

belt, and an inclined guide located at one side of said belt spaced from said finger.

3. The combination with a traveling belt, of a finger rigidly secured at one side of the belt and extending substantially perpendicular thereto, said finger extending substantially half way across the belt and with a shoulder at one side of the finger spaced from the extremity.

4. The combination with a traveling belt, of a finger rigidly secured at one side of the belt and extending over the same, said finger comprising a shoulder stopping short of the center line of said belt and with an extremity extended beyond said shoulder substantially to the center line of said belt.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER L. MONTGOMERY.

Witnesses:

JAY D. MILLER,
ALBERT G. HUBBARD.