Feb. 23, 1932. L. LINK 1,846,811

TAPE SERVING MACHINE

Filed March 8, 1929 2 Sheets-Sheet 1

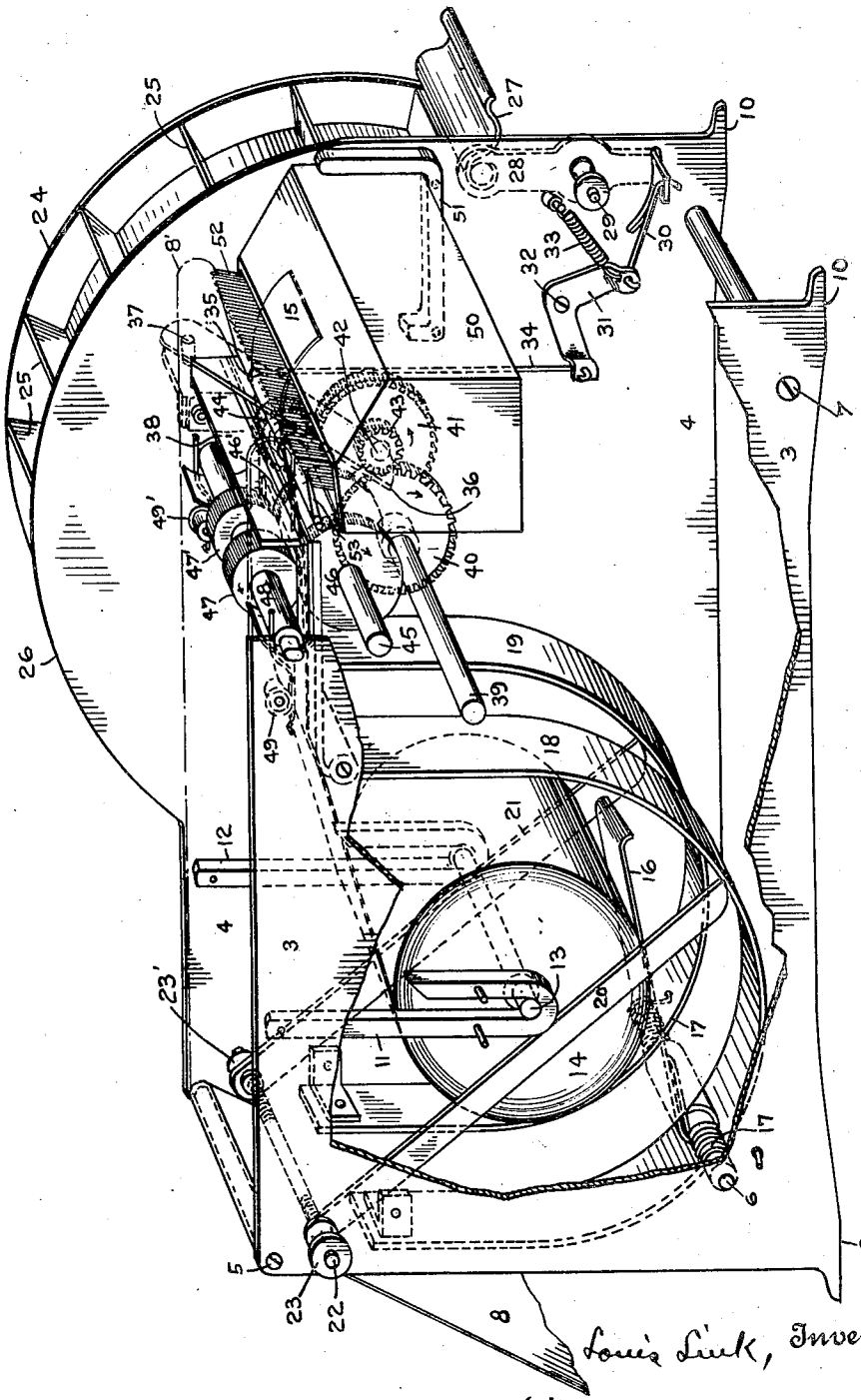


Fig. 1

Louis Link, Inventor

By his Attorney Thompson & Hill.

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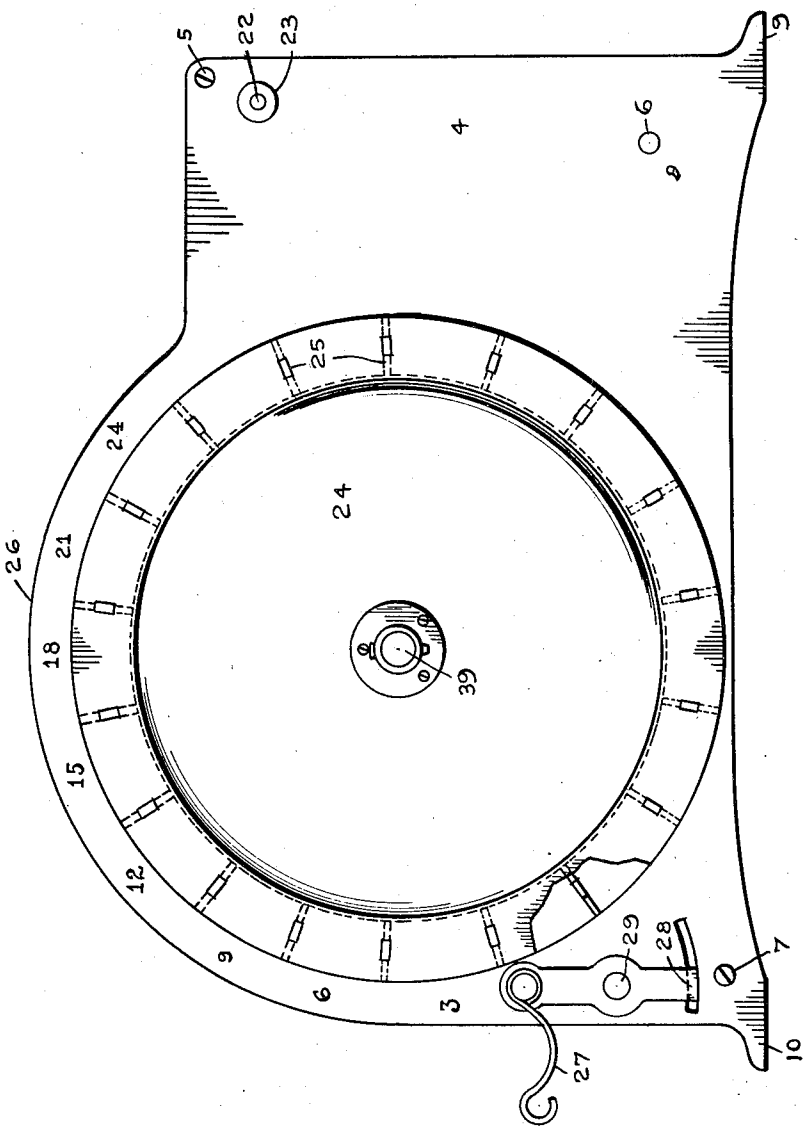


Fig. 2

Louis Link, Inventor

By his Attorney Thompson & Hill.

Patented Feb. 23, 1932 1,846,811

UNITED STATES PATENT OFFICE

LOUIS LINK, OF NEW YORK, N. Y.

TAPE SERVING MACHINE

Application filed March 8, 1929. Serial No. 345,543.

My invention relates to improvements in tape feeding machines and more particularly has reference to and is illustrated in the accompanying drawings in its application to a machine adapted for use upon a counter or in other convenient positions for feeding or dispensing predetermined lengths of gummed paper strip or tape such as commonly used for closing or securing paper wrappings.

Referring to said drawings, Fig. 1 illustrates in perspective, parts being broken away, a suitable form of device or machine embodying an application of my invention, and Fig. 2 is a side elevation of the same, looking from left to right at Fig. 1.

3 and 4 indicate the sides or frame of the machine, spaced apart and held by suitable tie rods or bolts such as 5, 6 and 7, the bolt 5 serving as a hinge or pivotal bearing for the cover 8. The bottoms of the side plates are preferably provided with feet 9, 10 which may be provided with rubber or felt base portions, if desired.

Upon the inner sides of the walls 3 and 4, are suitably secured hangers 11, 12 in the bottom of which is seated a spindle 13, carrying a roll 14 of paper, adapted to unwind clockwise, the free end of the same being indicated by the reference character 15. Upon the lower tie rod or bolt 6, is pivotally secured a strap or braking member 16, normally pressed against the roll 14 by springs 17, for retarding the unwinding of the roll of paper. 18, 19 indicate metallic straps secured as shown at opposite sides within the casing, and 20, 21 indicate side members pivotally mounted upon the spindle 22, which is threaded at opposite ends and provided with thumb nuts 23, 23′ also threaded, so that, when the said thumb nuts are turned in, the side guides 20, 21 are adjustably tensioned against the side of the roll 14, and properly guide the same.

The wheel 24 is provided with cross pieces, such as 25, which may be pulled by the fingers rotating the wheel 24 anticlock-wise. These finger pieces 25, are equally spaced a predetermined distance, say 3″, and the outside of the case above the wheel indicated at 26, is marked with a scale indicating spacing from 3″ to 24″, so that, in order to cut a strip of gummed paper of predetermined length, the fingers are applied to the wheel at a predetermined point, and the wheel is pulled toward the operator looking at Fig. 1, until the fingers strike the cut-off handle 27. This handle is secured in the top of the lever 28, pivotally mounted at 29, and pivotally connected at the bottom to the link 30, which in turn is pivotally connected to the bell crank 31, pivotally mounted at 32, an expansion spring 33 being connected to the wall 4, and bell crank 31, as shown. The opposite end of the bell crank 31, is pivotally connected to the rod 34, which in turn is pivotally connected at 35, to the knife 36, pivotally mounted at 37, this knife bearing against the knife bar 38, beveled with a cutting edge similar to the cutting edge upon the upper surface of the knife 36, so that, as the knife 36 moves upwardly, by the action of the cut-off mechanism described, the free end 15, of the roll of paper, is cut off, and the under side thereof, being suitably gummed, serves for securing the wrappings of packages, etc.

The operating wheel 24 is mounted upon a shaft 39, and this shaft carries a gear 40, meshing with pinion 43, on shaft 42, which also carries a gear 41, which meshes with pinion 44, upon shaft 45, carrying friction rollers 46, 46′, which in turn bear against friction rollers 47, 47′ upon shaft 48, which shaft is mounted in the side walls 3 and 4 with a little vertical play, the same being pressed downwardly by springs 49, 49′, to insure proper frictional engagement or pressure for feeding the strip of paper from the roll 14.

50 indicates a suitable metal box, seated in

brackets such as 51, and between the side walls 3 and 4, from which point it is easily removed. This box is intended to carry water and an inverted brush, the bristles 52 of which are in the path of movement of the gummed strip 15, a suitable flap 53 being adapted to lay against the side of the same. The cover 8, when thrown closed in the position shown in dotted outline at 8', also tends to press the strip 15 with its under side gummed against the bristles 52, which apply the water thereto, so that the strip of predetermined length, when cut, is thoroughly moistened, ready for immediate application to the package or wrapping. Thus the entire operation of predetermining the length of strip required, and of cutting and moistening the same, is provided for with a single sweep of the hand, the figures indicating the proper cross piece 25, according to the scale on the outside of the case, adjacent the wheel, and in rotating the wheel toward the operator and downwardly, the hand strikes the cut-off mechanism 27, after having fed the required length of strip. The operation is thus rendered convenient, simple, expeditious, and certain, and of course, various modifications may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

I claim:

1. A strip feeding machine comprising a casing, strip feeding means therein, operating mechanism for said feeding means comprising a rotatable wheel having a plurality of manually engageable, circumferentially spaced members thereon, a plurality of marks on the casing adjacent the wheel and correlated with said wheel members, and means, acting in conjunction with the members on the wheel, to predetermine the lengths of strip fed, dependent on the initial peripheral location of the member engaged by the operator.

2. A strip feeding machine comprising a casing, strip feeding means therein, operating mechanism for said feeding means comprising a rotatable wheel having a plurality of manually engageable, circumferentially spaced members thereon, a measuring scale having a plurality of marks on the casing adjacent the wheel and correlated with said wheel members, and means, acting in conjunction with the members on the wheel, to predetermine the lengths of strip fed, dependent on the initial peripheral location of the member engaged by the operator.

3. A strip feeding machine comprising a casing, strip feeding means therein, operating mechanism for said feeding means comprising a rotatable wheel having a plurality of manually engageable, circumferentially and equally spaced members thereon, a plurality of marks on the casing adjacent the wheel and spaced apart the same distance as the circumferential wheel members, and means associated with the wheel and acting in conjunction with the members on the wheel to predetermine the lengths of strip fed, dependent on the initial peripheral location of the member engaged by the operator.

4. A strip feeding machine comprising a casing, strip feeding means therein, operating mechanism for said feeding means comprising a rotatable wheel having a plurality of manually engageable, circumferentially spaced members thereon, a plurality of marks on the casing adjacent the wheel and correlated with said wheel members, and means on the casing disposed adjacent the path of movement of the members on the wheel for predetermining in conjunction therewith the lengths of strip fed from the machine.

5. A strip feeding machine comprising a casing, strip feeding means therein, operating means for said feeding means including a manually operatable wheel, operative connections between the wheel and said feeding means, manually engageable members on said wheel whereby said wheel can be rotated, a measuring scale on the casing adjacent the path of rotation of said members and having marks thereon to indicate lengths of strip fed from the machine, the operative connections between the wheel and feeding means being so proportioned that the manual movement of any one of the wheel members along the scale will feed the strip a distance corresponding to the increment indicated on the scale.

6. A strip feeding machine comprising a casing, strip feeding means therein, operating mechanism for said feeding means including a manually rotatable wheel having circumferentially spaced members engageable by the hand of the operator, a measuring scale adjacent the path of movement of said members, and abutment means arranged adjacent the path of movement of said members and acting in conjunction with said scale and said wheel members to predetermine the lengths of strip feed from the machine.

7. In a strip feeding device of the class described, a casing, a wheel rotatably carried by said casing, feeding means for feeding a strip from said machine, said feeding means being always operatable proportionately with the movement of said wheel, means on the wheel for rotating said wheel, and cut-off mechanism having operating means disposed adjacent the path of movement of said means on the wheel, said means on the wheel acting in conjunction with the operating means for the cut-off mechanism, to predetermine the amount of strip fed, dependent upon the peripheral location of the point at which the operator grasps said means on the wheel.

8. In a strip feeding device of the class described, a casing, a wheel rotatably mounted thereon, feeding means for the strip, said feeding means being always operatable proportionately with the movement of said wheel, means on the wheel for rotating said wheel, and cut-off mechanism having operating means disposed adjacent the path of movement of said means on the wheel, said wheel being rotatable always in the same direction.

In testimony whereof I hereunto affix my signature.

LOUIS LINK.