No. 704,058. Patented July 8, 1902.

M. W. LILLY.

ENVELOP FEEDER FOR PRINTING PRESSES.

(Application filed Apr. 13, 1901.)

(No Model.)

Fig. 1.

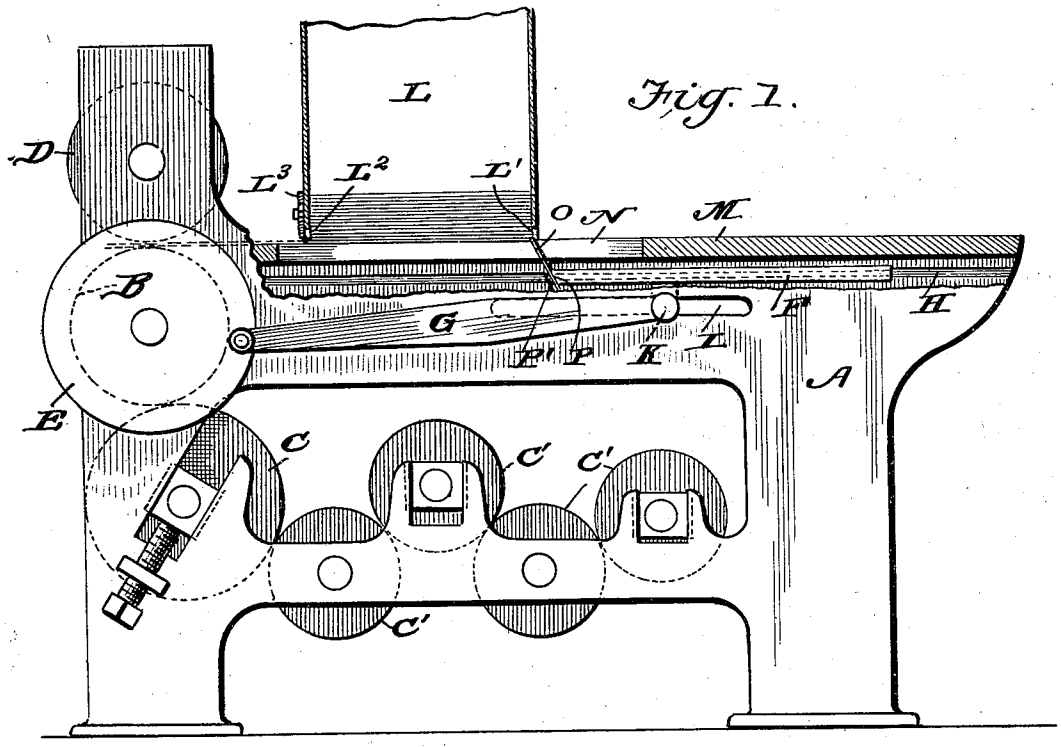


Fig. 2.

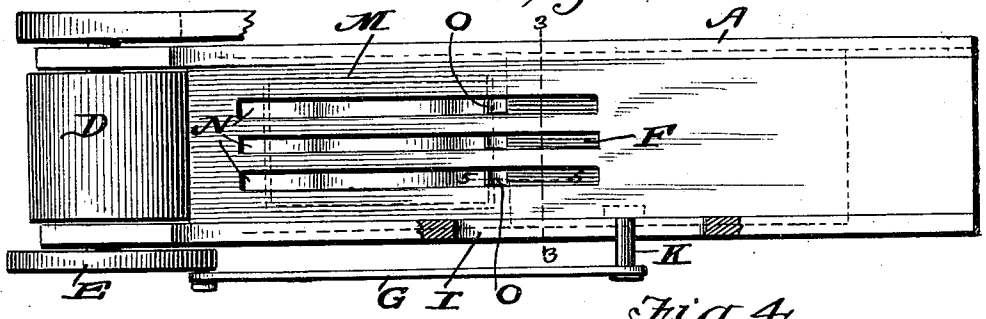


Fig. 3.

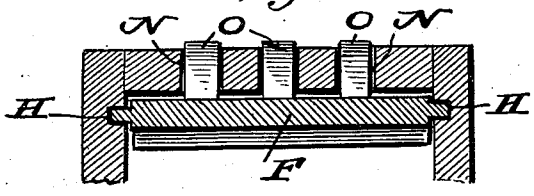


Fig. 4.

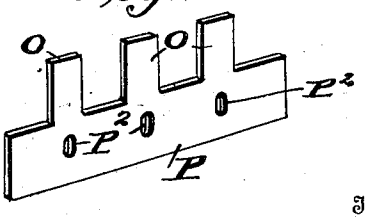
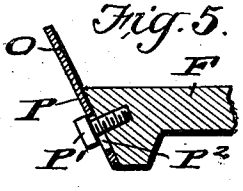


Fig. 5.



Witnesses
M. A. Blondel
Chauncey Shaw

Inventor
M. W. Lilly.

By Munn & Co
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MYRON W. LILLY, OF LEAVENWORTH, KANSAS.

ENVELOP-FEEDER FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 704,058, dated July 8, 1902.

Application filed April 13, 1901. Serial No. 55,747. (No model.)

To all whom it may concern:

Be it known that I, MYRON W. LILLY, a citizen of the United States, residing at Leavenworth, in the county of Leavenworth and State of Kansas, have invented a new and useful Envelop-Feeder for Printing-Presses, of which the following is a specification.

This invention relates generally to printing-presses, and more particularly to an apparatus for feeding envelops or cards to the printing-rolls for the purpose of printing said envelops or cards.

The object of the invention is to provide an exceedingly cheap, simple, and efficient automatic envelop feeder and printer which will feed the envelops one at a time to the printing-rolls.

The invention consists in certain details of construction and novelties of combination, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a side elevation, partly in section, illustrating my envelop feeder and printer constructed in accordance with my invention; Fig. 2, a plan view, the envelop-hopper being shown in dotted lines; Fig. 3, a transverse section on the line 3 3 of Fig. 2; Fig. 4, a detail view of the feeder-plate, and Fig. 5 a section on the line 5 5 of Fig. 2.

In carrying out my invention I employ a main frame A, at the forward end of which is journaled a printing-roller B, ink being supplied to the said roller by means of an ink-roller C, adjustably journaled in the main frame below the printing-roller and receiving ink from a series of inking-rolls C', said rolls receiving the ink from any suitable source of supply.

A platen-roller D is journaled in the upright portion of the main frame directly above the printing-roller and operates in unison therewith, the envelops to be printed being fed between the printing and platen rollers. The printing-roller is driven by means of a suitable pulley and belt arranged upon one side, and a crank-disk E is mounted upon the other end of the shaft of the printing-roller, said crank-disk being connected to a sliding block F by means of a pitman G, so that with each rotation of the printing-roller the block F is caused to slide back and forth in the main frame, guides H being cut in the sides of the frame and in which the sliding block travels back and forth, the side of the main frame being slotted, as shown at I, to permit the movement of the pin K, connecting the sliding block and pitman.

L indicates the envelop hopper or box, arranged above the table M of the main frame, said table having three parallel longitudinal slots N produced therein, and working in these slots are pusher-fingers O, carried by or integral with the feed-plate P, which is adjustably secured to the inclined end of the sliding block F by means of a set-screw P', passing through the elongated openings P^2, so that the plate P can be adjusted as desired in order to project the pusher-fingers O a greater or less distance above the face of the table N. The envelop-hopper L is arranged a short distance to the rear of the printing-rolls, the position of the said hopper being regulated according to the size of the envelop to be printed.

A narrow opening L' is produced in the rear side of the hopper L at the bottom, and a similar opening L^2 is produced in the forward side near the bottom, and a gage-plate L^3 is arranged upon the exterior of the box and is adapted to be adjusted vertically in order to permit only one envelop to be fed from the hopper at a time, the lowermost envelop being fed along the slotted face of the table by means of the pusher-fingers O, contacting with the end of the envelop and forcing it forwardly until the end is gripped between the printing and platen rollers, the pitman being so connected to the crank-disk of the printing-roller that as one envelop is being ejected from between the printing and platen rollers another envelop will have been fed ready to be gripped thereby. It will thus be seen that at each revolution of the printing-roller one envelop will be fed to the said roller, and this envelop will be the lowermost one of a series located in the hopper L. Furthermore, it will be noted that the envelops are fed exactly in the condition in which they are sold, thus avoiding the necessity of opening the flaps for the purpose of feeding the envelop.

The device herein shown and described is exceedingly strong and durable, and by avoiding the use of springs and levers the chances

of the machine getting out of order are reduced to a minimum. Furthermore, the machine can be operated at any desired speed, for the reason that only one envelop can be fed at a time, and the feeding of this one envelop is absolutely dependent upon the printing of the preceding envelop.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

A machine for feeding and printing envelops comprising in combination a main frame having the printing-roll, the platen-roll and inking-rolls journaled therein, the table having a plurality of longitudinal slots, a block sliding in ways in the sides of the main frame, and beneath the table, the forward end of said block being inclined, the feed-plate having an elongated opening, said plate having a plurality of pusher-fingers which project through the slots of the table, said feed-plate being adjustable upon the end of the sliding block, the envelop-hopper arranged above the slotted portion of the table, said hopper having openings at the bottom of the front and rear sides, and a gage-plate adjustable upon the exterior of the front side of hopper, and means for operatively connecting the printing-roll and sliding block for the purpose described.

MYRON W. LILLY.

Witnesses:
L. A. SIMMONS,
M. E. ALBRIGHT.