

H. D. & D. W. SWIFT.
Envelope Machine.

2 Sheets—Sheet 1.

No. 211,804.

Patented Jan. 28, 1879.

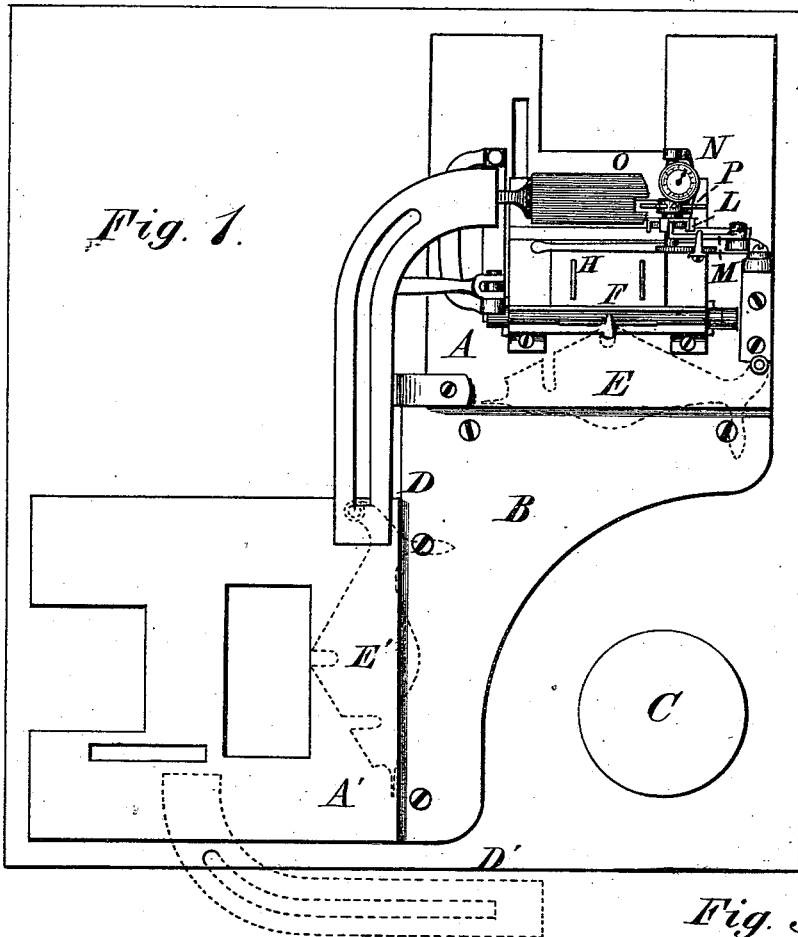


Fig. 1.

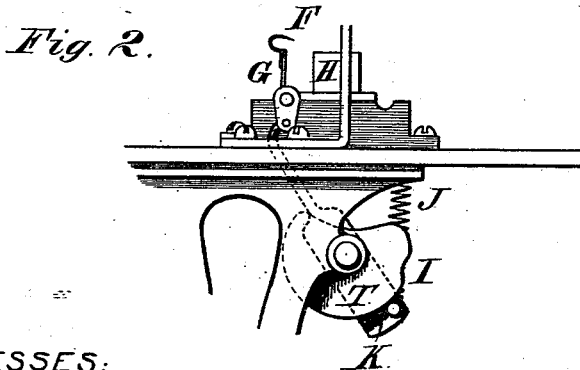


Fig. 2.

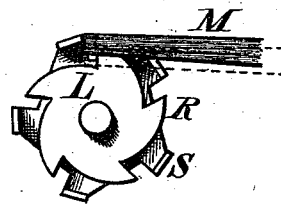


Fig. 3.

WITNESSES;

Edward H. Hill.
Geo. Dunn.

INVENTORS;

H. D. & D. W. Swift.
PER. ATT'Y. J. G. Arnold

UNITED STATES PATENT OFFICE.

HENRY D. SWIFT AND D. WHEELER SWIFT, OF WORCESTER, MASS.,
ASSIGNORS TO G. HENRY WHITCOMB & CO.

IMPROVEMENT IN ENVELOPE-MACHINES.

Specification forming part of Letters Patent No. **211,804**, dated January 23, 1879; application filed April 9, 1877.

To all whom it may concern:

Be it known that we, HENRY D. SWIFT and D. WHEELER SWIFT, both of the city and county of Worcester, State of Massachusetts, have invented certain new and useful Improvements in Envelope-Machines, which are set forth in the following specification:

Our invention is designed to insure more perfect action in certain details of operation of the machines.

Its nature consists in the construction and combination of a stop-wheel with the counting mechanism, and also in a peculiar form and motion given to the sealing-flap folder, as hereinafter more fully described.

In the accompanying drawings, Figure 1 on Sheet 1 shows our invention as applied to our machine patented December 26, 1876, as seen from above—Fig. 2 showing a view from the right of Fig. 1 of the folder G and its operating spring and cam J I, and Fig. 3 showing the form of the stop-wheel, with its lever in stopping position; and Sheet 2 shows a plan view from the right of Fig. 1, Sheet 1, the same letters indicating the same parts wherever they occur.

A is the bed of the machine; B, the table; C, the seat of the tender; D, the delivery-trough for finished envelopes; E, the feed-table, (shown in broken lines.) At F is shown the hook or extension of the sealing-flap folder G, the use of which is to give a second touch to the point of the flap to hold it down as the lifting-fork H lifts the folded envelope for the carriage, its motion being given by the cam-notch I and spring J through the connection K. This keeps the loose flap in place, preventing its rising to catch and crumple, allowing its edge to be made as round and full as desired.

L is the stop-wheel, made with one set of ratchet-shaped projections, R, corresponding to the number of arms P, and on which the bent end of the lever M rests, and by which said lever is raised, and also with another set of projections, S, similar in number, and so placed as to meet the end of lever M when it is raised by the risers R, and each stop S is

so far from its corresponding riser as to allow the bent part of lever M to fall freely between them when the wheel L is at rest, as shown in Fig. 3, the broken lines showing the lever dropped. The lever M is a simple lever, pivoted at one end, the other having a small part bent at right angle and resting on the stop-wheel L, its weight being sufficient to cause it to fall; or a spring may be used.

In fast-running machines the sudden motion given to the arms P by the envelope as carried up by the lifter O, tends to throw them too far and miscount, to prevent which various brakes and frictions have been devised, which are uncertain and unreliable. With our stop-wheel, which is fast on the same shaft as the arms P, and suitably connected to the register N, the lever M gives a certain positive stop and perfect freedom of action, insuring a perfect count, no matter how quick or sudden a flip may be given to the arms.

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

1. The stop-wheel L, having a series of raising and a series of stopping projections or surfaces, in combination with a stop mechanism, substantially as described.

2. The combination of the stop wheel and lever with the shaft and arms P, substantially as described.

3. The combination of the stop-motion, the arms P, and the register N, substantially as and for the purposes set forth.

4. The cam T, having two depressions, and the spring-controlled connection K, in combination with the folder G, having a hook or projection, F, producing a secondary motion to said folder, substantially as and for the purposes set forth.

In testimony whereof we hereunto set our hands in the presence of two witnesses.

HENRY D. SWIFT.
D. WHEELER SWIFT.

Witnesses:

HARRY M. WOOD,
JOHN S. BRIGHAM.