

G. H. Reay.
Counting Attach't to Envelope Mach.
N^o 37199. Patented Dec. 16. 1862.

Fig. 1

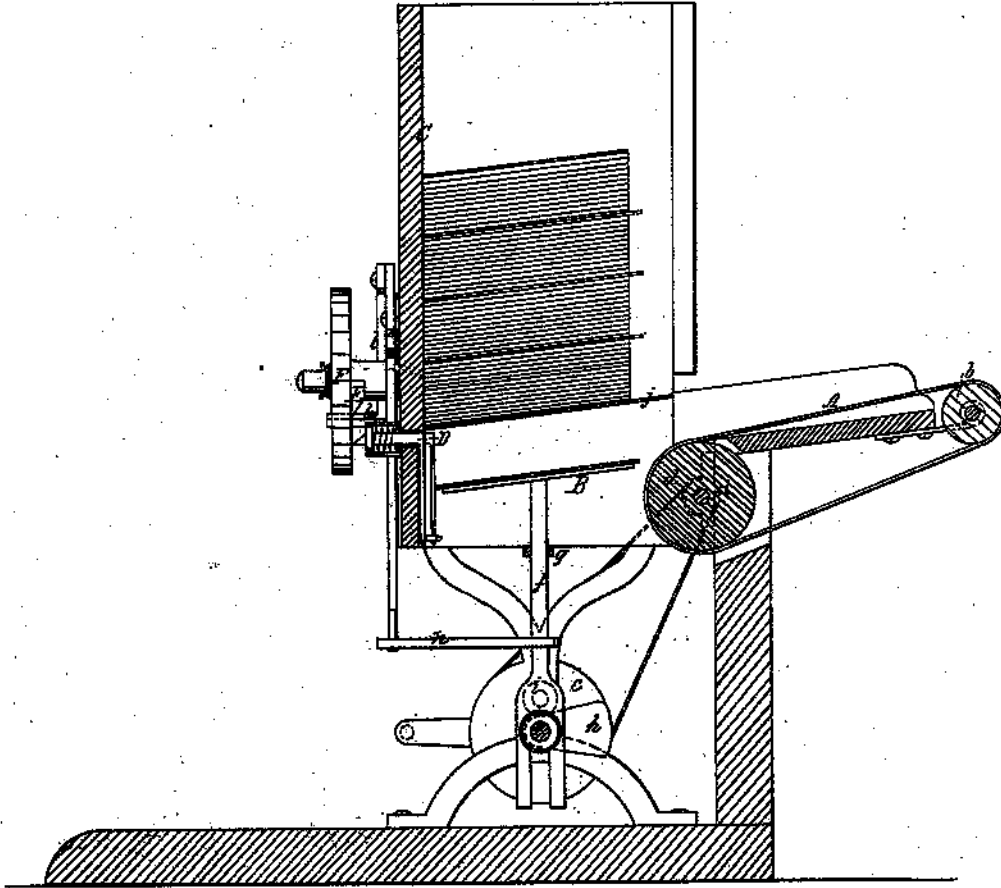
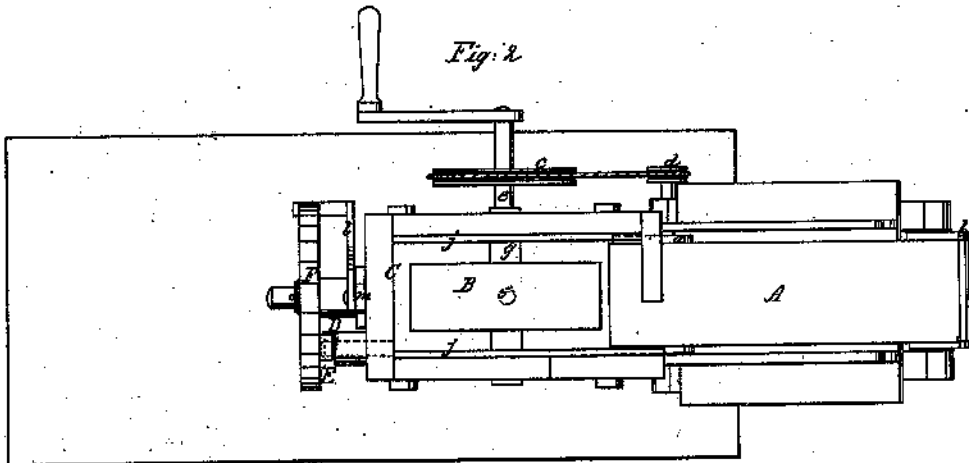


Fig. 2



Witnesses
Sam'l. Hines
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UNITED STATES PATENT OFFICE.

GEORGE H. REAY, OF HUDSON, N. J., ASSIGNOR TO HIMSELF AND GEO. W. BENNETT, ASSIGNORS TO JOHN Q. PREBLE, OF NEW YORK, N. Y.

COUNTING ATTACHMENT FOR ENVELOPE-MACHINES.

Specification forming part of Letters Patent No. 37,199, dated December 16, 1862.

To all whom it may concern:

Be it known that I, GEORGE H. REAY, of Hudson city, in the county of Hudson and State of New Jersey, have invented a new and Improved Counting Attachment to Envelope-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of my invention. Fig. 2 is a plan or top view of the same.

Similar letters of reference in both views indicate corresponding parts.

The object of this invention is to place the envelopes as they are discharged from the machine in such order that they can easily and without loss of time be made up in packs, each containing twenty-five or any desired number of envelopes.

The invention consists in so disposing the envelopes as the same are discharged from an envelope-machine that one or more envelopes are pushed out beyond the edge of the regular pile at intervals of twenty-four or any other desired number of envelopes, and by these means the whole pile is divided off, so that the envelopes can be taken out without counting and made up in packs of the desired number.

To enable those skilled in the art to make and use my invention, I will proceed to describe it with reference to the drawings.

The envelopes, after they are completed, are placed on or discharged on the endless apron A, which is stretched over the rollers *a b*, and to which motion is imparted by a belt running over pulleys *c d* from the driving or main shaft *e* of the counting attachment. The apron A deposits one envelope after the other on a table, B, which is secured in a slightly-inclined position on the upper end of a vertical arbor, *f*, the lower forked end of which straddles the main shaft *e*, and which passes through a cross-bar, *g*, secured to the under side of the box C. A cam, *h*, which is firmly keyed to the shaft *e*, and which acts upon a roller, *i*, secured to the side of the vertical arbor *f*, imparts to the latter a rising-and-falling motion at regular intervals, and the table B, together with the envelope, is pushed up beyond ledges *j*, pro-

jecting from the inside of the box C. This box is made so that the envelopes fit the same exactly, and in being pushed up beyond the ledges *j* the edges of the envelopes are crowded down, and as the table B recedes said edges catch on the ledges, and the envelopes are retained, as clearly shown in Fig. 1 of the drawings, where the envelopes are indicated in red outlines. By the inclined position of the table B, and by the velocity imparted to each envelope by means of the apron A, the several envelopes are brought in such a position that their outer edges come in contact with that side of the box opposite the apron, and that the same, when pushed up beyond the ledges *j*, form a regular pile, the edges of the several envelopes being placed one exactly above the other, as clearly shown in Fig. 1 of the drawings.

D is a spring-dog, the shank of which extends down in a mortise on the inside of the box C, opposite to the apron A and flush with the inner surface of said box. The point of this dog projects through the side of the box, and it forms an inclined plane, so that a cam, E, projecting from the inner surface of a ratchet-wheel, F, in passing said point forces the dog into the position shown in red outlines in Fig. 1. The ratchet-wheel F is provided with twenty-five teeth, and for each envelope deposited by the table B on the ledges *j* it is propelled one tooth by the action of a pawl, *l*, suspended from a pivot at the upper end of a slide, *m*, to which a rising-and-falling motion is imparted by an arm, *n*, extending from the vertical arbor *f*. If, during the rotary motion thus imparted to the ratchet-wheel, the cam E comes opposite the point of the dog D, the latter is retained in the position shown in red outlines, and the envelope deposited during this time by the apron A on the table B is not permitted to come down to the opposite surface of the box, and if the table is now pushed up, the inner edge of this envelope projects beyond the corresponding edges of the envelopes previously deposited on said ledges. At the same time the ratchet-wheel moves on and the cam passes the point of the dog, leaving the same free to return to its original position, and the next succeeding envelope is brought up on the ledges in the regular order. The pile of envelopes in the

box will thus, by the protruding envelopes or markers, be divided in packs of twenty-five each, and each pack can easily be taken out and fastened together in the ordinary manner without loss of time.

It is obvious that by increasing or decreasing the number of teeth of the ratchet-wheel the number of envelopes between the markers can be varied at pleasure; but the ordinary number contained in each pack being twenty-five, I have represented the ratchet-wheel with that number of teeth.

In practice, two of my counting devices will be attached, one to each end of an envelope-machine, and while the envelopes are folded and counted by the action of the machine the attendant has time to take the packs, one after

the other, from the boxes of the counting devices, and to fasten them by means of paper bands, or in any other desirable manner.

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

So disposing the envelopes as the same are discharged from an envelope-machine that one or more envelopes are pushed out beyond the edge of the regular pile at intervals of twenty-four or any other desired number of envelopes, substantially as and for the purpose herein shown and described.

GEORGE H. REAY.

Witnesses:

TIMOTHY SHINE,
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