

No. 833,754.

PATENTED OCT. 23, 1906.

W. J. SHEETZ.
MAIL MARKING MACHINE.

APPLICATION FILED DEC. 5, 1903, RENEWED FEB. 27, 1906.

Fig. 1.

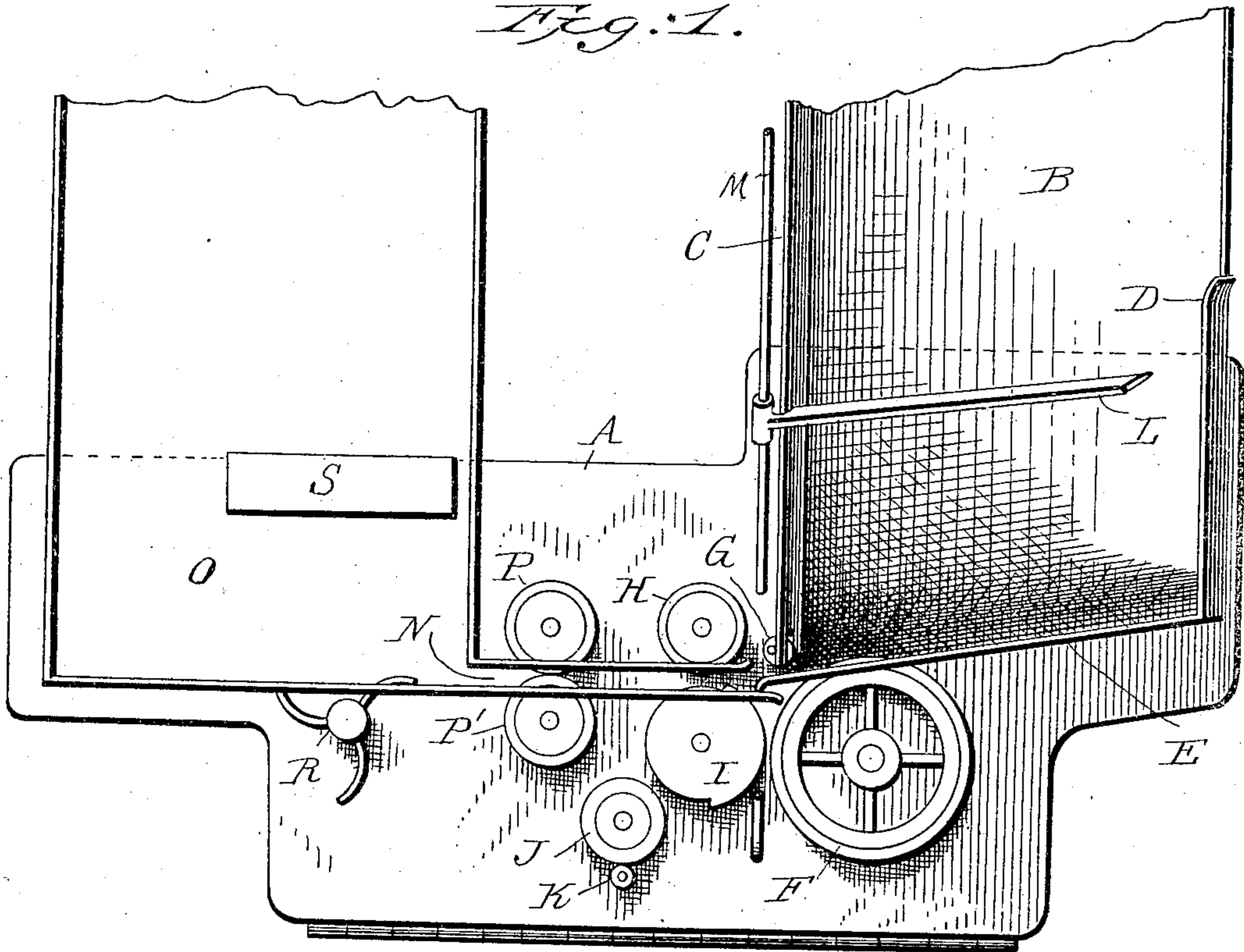


Fig. 2.

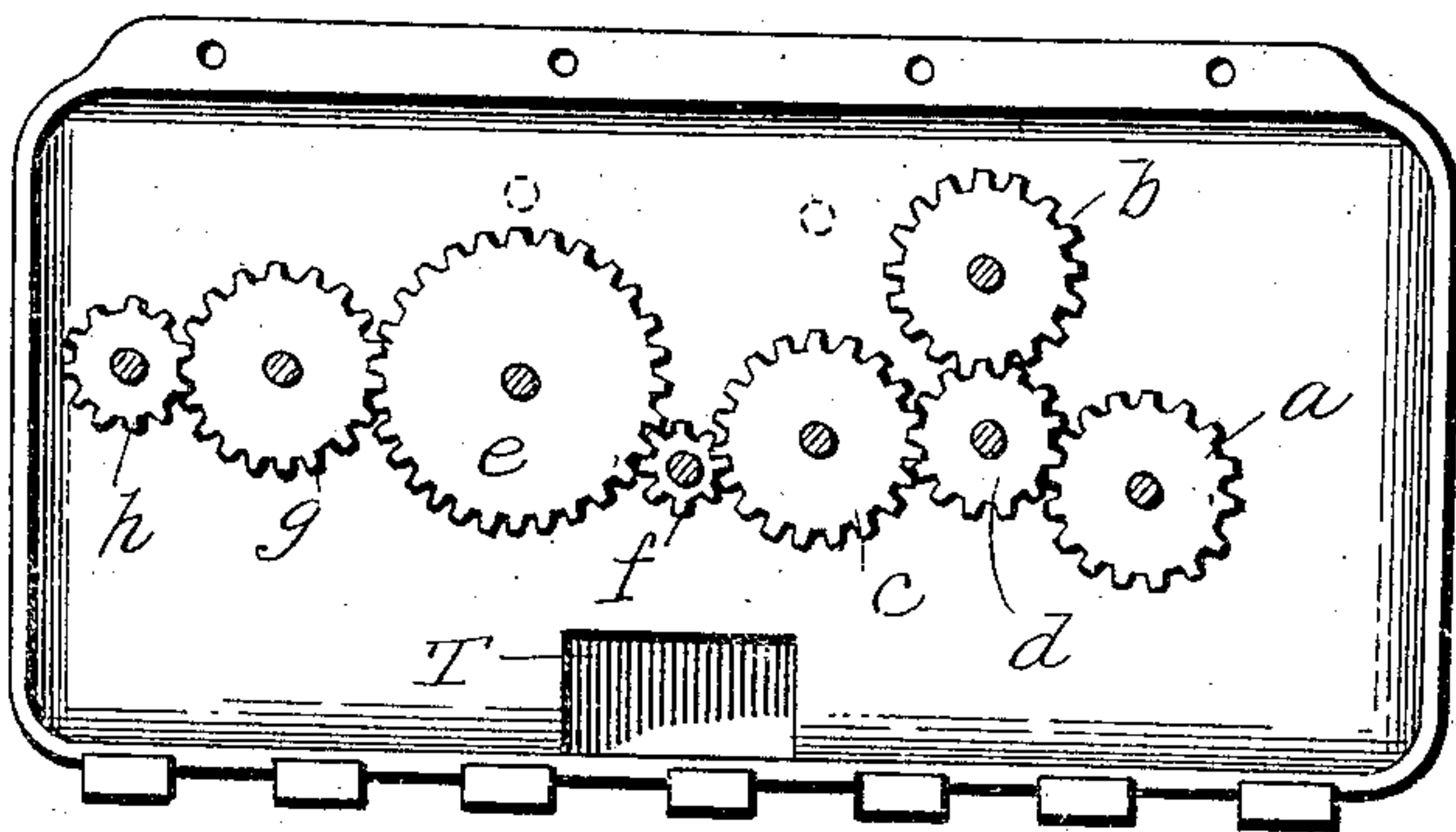
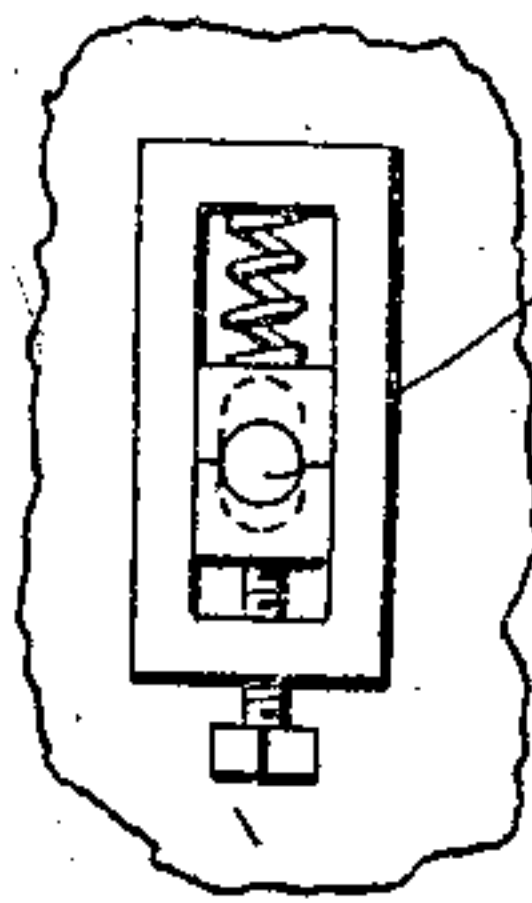


Fig. 3.



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MAIL-MARKING MACHINE.

No. 833,754.

Specification of Letters Patent.

Patented Oct. 23, 1906.

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To all whom it may concern:

Be it known that I, WILLIAM J. SHEETZ, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Mail-Marking Machines; and I do 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 generally to mail-marking machines, and particularly to the means for removing or conveying the marked and canceled mail away from the marking and canceling mechanism of such machines and delivering it to the stacker-table; and it has for its object to provide novel means adapted to quickly remove the mail, one piece at a time, from the marking and canceling mechanism the instant it has been completely marked and canceled, thus obviating all liability of the mail being marked a second time and the possibility of the smearing of the ink on the mail, and delivering and stacking it on the stacker-table; and it consists of the parts and combinations of parts hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a plan view of a mail-marking machine containing my improved take-off and stacking device. Fig. 2 is a plan view of the system of gearing employed to operate the various parts of the machine; Fig. 3, a detail plan view of the bearing for wheel P'.

Similar letters refer to similar parts throughout all the views.

Referring to the drawings, A represents the table of the machine, and B an inclined chute or tray having side guides or walls C and D and an end guide or wall E. The end guide or wall E is slotted to receive the feed-wheel F, and the guide or wall C is also slotted for the separating disk or wheel G, and said walls C and E are arranged so that mail-matter may readily pass between them and out of the tray or chute and to and between the pressure-roller or platen H and the stamping or marking die I.

J represents an inking-wheel, and K an ink-feeding device for said inking-wheel.

L is a follower arranged to slide on a track or rod M, secured alongside the chute, which as-

sists the mail in its gravitation down said chute.

All the parts above mentioned are fully described and claimed in my pending application for Letters Patent, filed March 19, 1903, Serial No. 148,471, to which reference is made for a more detailed description, and form no part of my present invention, which is confined to the means for removing the mail from the marking device and stacking it on the stacker-table, as will now be described.

N represents a guideway formed by a pair of separated and parallel upright pieces on the table A, which lead to the stacker-table O and preferably form continuations of the walls of said tables, as shown. The peripheries of the marking die-wheels I and the pressure-wheel H project through suitable slots formed in the walls of the guideway N, and adjacent said wheel and die are arranged the take-off wheels P P', whose peripheries also project through slots in the walls of guideway N from opposite sides thereof. These wheels P P' are suitably tired to frictionally grasp mail-matter and are journaled to the table A, the wheel P being on a relatively fixed bearing and the wheel P' on a spring-pressed bearing P². The wheels are thus kept continually in contact and positioned to grasp the envelop or other piece of mail and pull it through the guideway after it has been canceled or marked and deliver it onto the stacker-table O, where it is struck by a rotary tappet R and pushed against a follower-block S, which slides loosely or freely on the table O and gradually moves backward as the number of pieces of mail increases in front thereof. The position of the take-off wheels P P' in relation to the platen-wheel and marking-die is such that on account of the more rapid rotation of the take-off wheels the envelop or mail-matter, after cancellation is quickly drawn or snatched from between the platen-wheel and the canceling wheel or die, and thus a second cancellation avoided. The tappet R consists of a hub having a number of bent or curved arms projecting therefrom, which extend through a slot in the wall of the stacker-table in position to strike the mail-matter immediately after it leaves the guideway.

Referring more particularly to Fig. 2, a represents the gear for the feed-wheel F; b,

the gear for the separator-disk G; *c*, the gear for the marking die or wheel I; *d*, an idler-gear; *e*, the gear for the take-off wheel P'; *f* and *g*, idler-gears, and *h* the gear for the tappet-wheel R. The gearing is so proportioned that the wheels P and P' revolve faster than the canceling and platen wheels, and preferably two or three times as fast, so that the envelop after marking is shot onto the stacker-table. T represents the ink-well.

The general operation of the machine is as follows: The envelops or other pieces of mail to be marked or canceled are placed on edge in the chute or tray, down which they gravitate toward the lower left-hand corner thereof, assisted by the follower L. The feed-wheel F tends to urge the lowest envelop toward the left; but the separator G, which rotates oppositely to wheel F, keeps pressing back the envelops and effects the separation thereof in such manner that only one envelop at a time is allowed to be forced by the feed-wheel past the separator-wheel and into the guideway N. The marking or canceling die or wheel is so timed that the cancellation will be effected at the proper point, after which the envelop is passed farther along the guideway by the action of the canceling-wheel I and the platen-wheel H until it gets into the bite of the take-off wheels P and P', which are revolving faster than the wheels H and I, and as soon as the envelop is in the bite of said wheels P P' it is quickly drawn along the guideway and clear of the canceling and platen wheels, so as not to interfere with the succeeding envelop. The take-off wheels pull the envelop along and project it onto the stacker-table, where it is struck by the tappet-wheel, and thus the successive envelops are stacked in succession on the table by the tappet-wheel, the follower-block sliding freely to compensate for the accretion of envelops. The envelops or mail-matter is fed to the canceling mechanism with its stamped end foremost, and the distance between the centers of shafts of the canceling mechanism and the shafts of the take-off wheels is the length of the canceling-stamp, so that when the end of the envelop enters

between the take-off wheels and is grasped thereby it has been completely marked, and it is instantly pulled from between the platen-wheel and the stamping-wheel before the die thereon is in position to again mark the envelop. The guideway-walls prevent the ends of the letters curling or bending around the canceling-wheel or platen as said letters leave the same and insure their entrance end foremost between the take-off wheels, thus obviating all liability of thin or short letters being curled around the canceling-wheel or the platen and of clogging the space between the canceling-wheel and the take-off wheels, and thus causing a stoppage of the machine.

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

1. A mail-marking machine comprising a table, a chute from which the mail-matter is guided onto the table, a stacker-table having walls and a pair of separated and parallel upright pieces extending to a point adjacent to the outlet from the chute, and providing a guideway, a marking-die and a pressure-roller working through the upright pieces adjacent to the chute, and a pair of take-off wheels working through the upright pieces adjacent to the stacker-table.

2. A mail-marking machine comprising a table, a chute from which the mail-matter is guided onto the table, a stacker-table having walls and a pair of separated and parallel upright pieces extending to a point adjacent to the outlet from the chute and providing a guideway, a marking-die and pressure-roller working through the upright pieces adjacent to the chute, a pair of take-off wheels working through the upright pieces adjacent to the stacker-table and tappet-wheel having curved arms working through the wall of the stacker.

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

WILLIAM J. SHEETZ.

Witnesses:

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