

J. K. TOLES.
POST CANCELING MACHINE.
APPLICATION FILED MAR. 4, 1902.

NO MODEL.

3 SHEETS—SHEET 1.

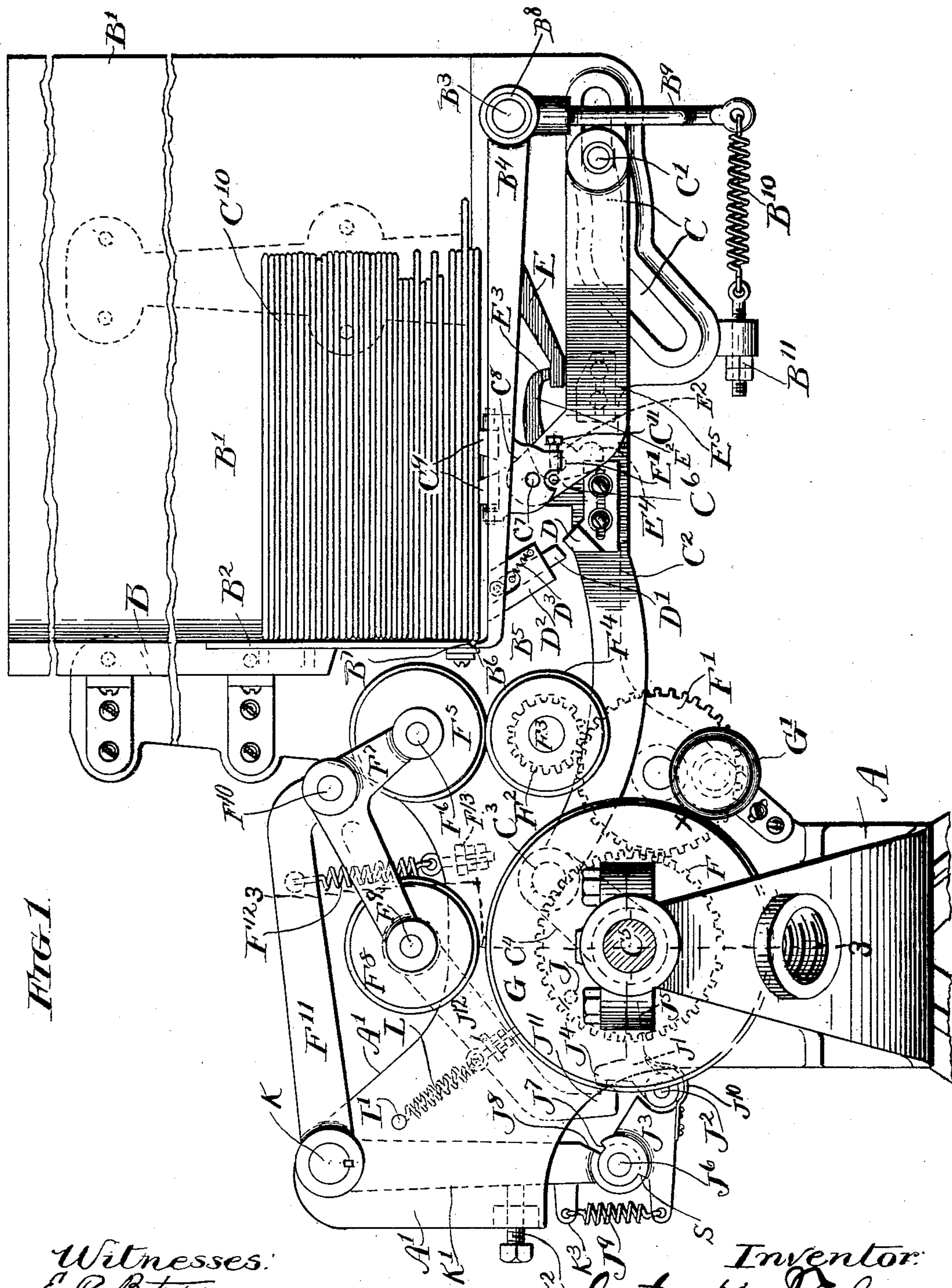


FIG. 1.

Witnesses:
E. P. Butler
C. A. Longfellow

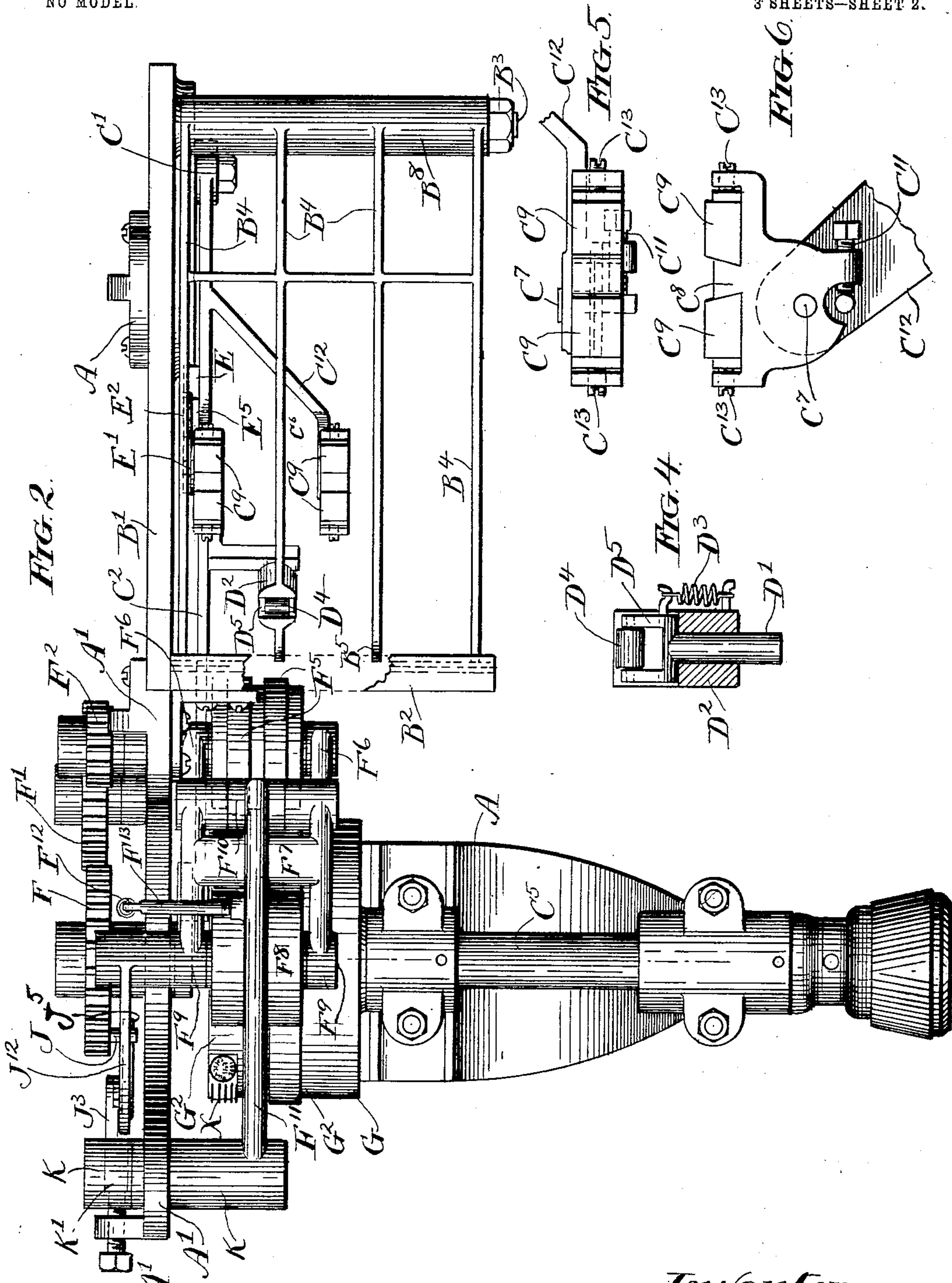
Inventor:
Justin Kay Toles
By Parker & Carter
Attys

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3 SHEETS—SHEET 2.



Witnesses:
E. P. Boga
C. A. Langfellow.

Inventor:
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3 SHEETS—SHEET 3.

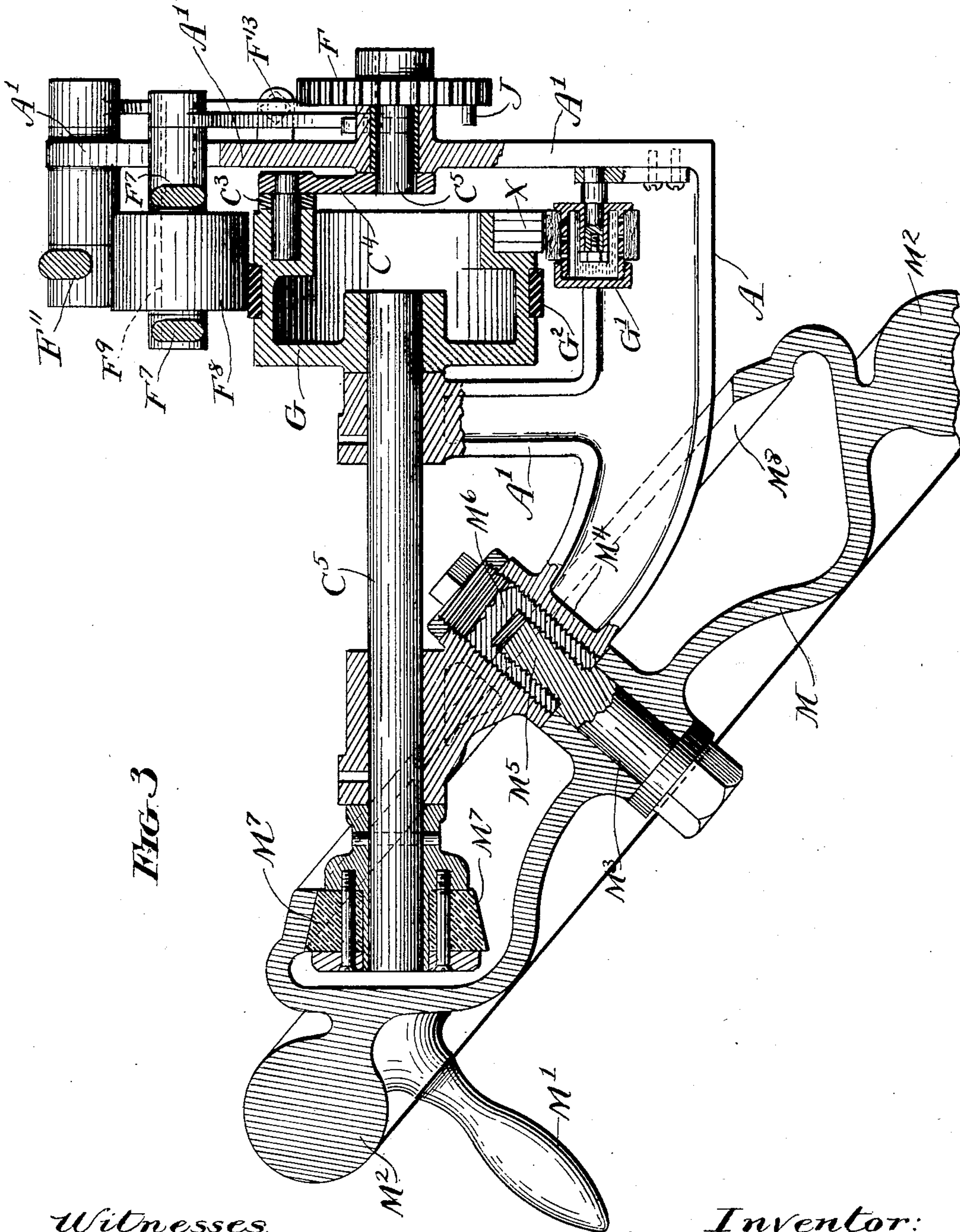


FIG. 3

Witnesses:
C. P. Butler
C. A. Longfellow.

Inventor:
Justin Kay Toles
By Parker & Carter
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UNITED STATES PATENT OFFICE.

JUSTIN KAY TOLES, OF CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO WORLD'S POSTAL SUPPLY COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF WEST VIRGINIA.

POST-CANCELING MACHINE.

SPECIFICATION forming part of Letters Patent No. 738,085, dated September 1, 1903.

Application filed March 4, 1902. Serial No. 96,576. (No model.)

To all whom it may concern:

Be it known that I, JUSTIN KAY TOLES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Post-Canceling Machines, of which the following is a specification.

My invention relates to machines for feeding letters, envelopes, or the like from a pile or package and then canceling the stamps thereon or otherwise printing, stamping, or impressing the same; and, as illustrated in my drawings and described in this specification, my invention is embraced in a stamp-canceling machine, such as is intended for use in post-offices and other places where postage-stamps are to be canceled.

My invention as I have here illustrated it is divided into sections or portions of a complete apparatus for performing the work referred to.

There is, in the first place, a suitable stand or frame including a receiver for the envelopes or letters.

There is, in the second place, a feeding mechanism whereby the letters or envelopes are successively and separately fed from a pile or package and in proper manner to be subsequently acted upon by the impressing or printing device.

There is, in the third place, a printing mechanism whereby such letters are successively printed or impressed in the desired manner.

My invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a part section with part shown in front elevation. Fig. 2 is a plan view with parts omitted. Fig. 3 is a section on the line 3-3 of Fig. 1. Figs. 4, 5, 6 are details.

Like parts are indicated by the same letter in all the figures.

A is the standard, on which, through the medium of proper supports A' A', is mounted the receiver B. This receiver is of any desired shape and size and position; but, as shown, it has a bottom B' and a forward side B² and is inclined or tilted. The inclination of this receiver may be secured by tilting the whole machine toward the left, as shown in Fig. 1; but of course it is not essential. The drawings do not show the tilting feature, as

this tilting is secured simply by the way in which the machine is supported. At the bottom of this receiver is pivoted on the pin B³ the fingers B⁴ B⁴, which form in this case not only the end or bottom of the receiver, but which are carried forward and upwardly turned at B⁵ to impinge against the lower edge B⁶ of the side B² of the receiver, and thus form a gate for what I have called the "discharge-way." In this case the discharge-way is that opening or way which is left when the gate-fingers are depressed. The lower edge of the side B² is cut away at B⁷, so that a sort of groove or slot is formed as a kind of mouth to such gate. B⁸ may be a sleeve-like body on the pin B³ and to which the fingers B⁴ may be attached. From it projects downwardly the arm B⁹, the lower end of which is connected by the spring B¹⁰ with the adjustable bolt B¹¹ in the frame-piece A', which forms part of the fixed support of the mechanism and is placed below the receiver. This fixed part of the frame-piece A' is provided with the cam-slot C, shaped as shown, and through which projects the pin C' from the reciprocating feeder-bar C². This feeder has a forwardly-projecting part pivoted at C³ on the pin or crank C⁴ of two-part driving-shaft C⁵, and by this means it is made to reciprocate back and forth, the pin C' sliding in the cam-groove C. Upwardly projecting from the feeder-bar C² is the block C⁶, on which is pivoted at C⁷ the feeder C⁸, provided with the pads C⁹ to engage the lower letter in the pile of letters C¹⁰. This feeder is adapted to rock on the pin C⁷ and is adjustably placed in any desired position by means of the set-screw C¹¹. There may be two sets of these feeders C⁹ C⁹ and their associated parts. They are separated from each other, as indicated in Fig. 2. The block C⁶ supports the feeder, which is shown on the upper part of the drawings in Fig. 2; but the arm C¹², projecting laterally from the feed-bar C², rises into proper position and serves to support the outer or (referring to Fig. 2) the lower feeder in the same manner that the upper feeder is supported on the block C⁶. The feed-pads C⁹ C⁹ are adjustably held in position by the screws C¹³ C¹³. As the shaft C⁵ is driven the feeder-bar will be re-

ciproated and its position changed by the
 cam C, so as to alternately raise and lower
 the feeder and alternately move the feeders
 forward and backward. The movements are
 5 timed so that in their forward motion the
 feeder-pads are in engagement with the last
 letter in the pile of letters. The feeder-pads
 are placed so as to come between the long arms
 of the gate. Upwardly projecting from the
 10 feeder-bar C² is the cam D, opposed to the
 lower inclined end of a pusher D', which is
 contained in the boss D² and is retracted by
 the spring D³. These parts are so related that
 after the feeder has operated to move the
 15 lower letter slightly forward, so that its front
 edge lies in the groove or mouth of the dis-
 charge-way, the cam D will engage the face
 D' and force the plunger against the action
 of the spring D³ upwardly against the lower
 20 letter. The end of this plunger is provided
 with a roller D⁴, supported in a yoke D⁵, which
 is supported in the boss D², which is secured
 upon so as to move with one of the fingers B⁴
 of the gate and is shaped so that it will bear
 25 upwardly against this letter without interfer-
 ing with its forward motion; but since the
 forward edges of all the letters above the
 lower one are free from the slot or mouth of
 the discharge-way the stack or pile of let-
 30 ters above the first letter will be lifted or
 pushed away from the slot by means of the
 pusher acting through the lower letter. As
 the feed-bar passes forwardly these parts dis-
 engage, the pusher is retracted to its normal
 35 position, and the lower letter is fed outwardly
 through the discharge. On one of the fingers
 B⁴ of the gate is secured the downwardly-pro-
 jecting cam-finger E. Pivoted to the frame
 or some fixed part at E' is a dog E², with an
 40 end E³ to engage the finger E and another
 end E⁴ in the path of the cam-block E⁵ on the
 feed-bar C². When the feed-bar moves to-
 ward the left in Fig. 1, this block E⁵ will en-
 45 gage the end E⁴ of the dog E² and force its
 other end, E³, downwardly, and since this end
 is adapted to engage the finger E it will force
 such finger downwardly, thus bringing the
 fingers of the gate down and opening the slot
 B⁷, so that the discharge-way is formed, as in-
 50 dicated. These several parts are not intended
 to be shown accurately in position, and they
 are capable of adjustment and capable of va-
 riation as to size, proportion, and arrange-
 ment according to the service to which the
 55 device is being put and the needs of its spe-
 cial conditions. As the motion of the feed-
 bar C² is further continued the end E⁴ of the
 dog E² will disengage from the block E⁵ and
 free the parts, so that by the action of the
 60 spring B¹⁰ the gate will be forced up and into
 the position shown in Fig. 1.

F is a gear-wheel on and driven by the shaft
 C⁵. It meshes with the gear F', suitably sup-
 ported in the frame, and this in turn meshes
 65 with the pinion F² on the shaft F³, whereby is
 driven the lower of the trip-rollers F⁴, which

is normally in engagement with the upper
 trip-roller F⁵. These trip-rollers may have
 elastic bands or surfaces and are, like the
 other parts, suitably mounted on studs pro- 70
 jecting from their respective supporting parts.
 The trip-roller F⁵ is mounted at F⁶ upon the
 movably-supported lever or arm F⁷, which
 also carries the platen-roller F⁸. This lever
 or arm F⁷ is movably or pivotally connected 75
 to another movable part or arm, F¹¹, which is
 pressed toward the printing-roller by means
 of the spring or other elastic device F¹². This
 spring may be adjustably attached to the
 frame—as, for example, at F¹³. Thus the entire 80
 lever F⁷, with the rolls F⁵ and F⁸, is held
 downwardly—the roll F⁵ toward F⁴ and the
 roll F⁸ toward the printing-roll G. This
 printing-roll is placed in engagement with the
 inking-roll G', and it will be suitably supplied 85
 with type—as, for example, at the point X—
 and provided with elastic bands G² G² to feed
 the letter forward. The type, of course, will
 be in the exterior surface of the roll and any
 arrangement desired may be used. In the 90
 present case I have assumed the existence of
 type at one point only—at the point X—or, if
 not type, a device for canceling stamps and
 the like. The type, printing, canceling, or
 other marking device will of course extend 95
 the desired length along the periphery of the
 roll G, and the formation, shape, and extent
 of such device will depend upon the condi-
 tions met with.

On the gear F is a pin J, which is associated 100
 with a dog J' on the arm J³ and provided with
 the hook J⁴ and the end J⁵, projecting into the
 path of the pin J. The arm J³ is pivoted at
 J⁶ and provided with the stop-face J⁷ to en-
 105 gage the corresponding face J⁸ and is con-
 trolled by the spring J⁹, whereby the dog is
 pulled downwardly. The dog is itself con-
 trolled by the spring J¹⁰, which tends to force
 it upwardly around its pivot.

A hook or engaging part J¹¹ on the end of 110
 the arm J¹², which may be rigid with or a part
 of the arm F⁷, is adapted to interlock with
 the hook J⁴. A stop S limits the movement
 of the arm J³ in response to the spring J⁹.

The bar or lever F¹¹ is pivoted on the pin 115
 K, and from the outer end of this pin there
 projects downwardly the arm K', in the lower
 end of which is carried the pivot J⁶, and a
 set-screw K² in the frame-piece A' impinges
 upon the back of this arm K', whereby the 120
 position of the platen-roll can be adjusted and
 determined within certain limits. The arm
 K' is rigid with or a part of F¹¹, and the stop
 K² coöperates with said arm. It is of course
 evident that the stop may be associated in 125
 any other way with the movably-mounted
 support F¹¹ for arm F⁷. It is further evident
 that if said stop is directly associated with F¹¹
 the part K' could be omitted. The spring J⁹
 is secured to the projection K³ from the arm K'. 130

L is a spiral spring secured at L' to the
 frame A' and at its lower end to the arm J¹²,

which it tends to draw upwardly, relieving the platen-roll when the hooks $J^4 J^{11}$ are disengaged.

The action of these parts just described is as follows: When the printing-roll has traveled about to a point where the pin J engages the end J^5 of the dog J' , the type or other printing or marking device will be in close proximity to the point where the platen-roll and the printing-roll are to be brought together and the hooks $J^4 J^{11}$ will be momentarily disengaged. If no letter is passing through between the trip-rolls, the hooks $J^4 J^{11}$ will remain disengaged and the platen-roll will remain in the elevated position indicated in Fig. 1. When in this operative position, the engagement of the hooks J^{11} and J^4 is prevented, because of the fact that their engaging parts do not register. If, however, at the time indicated a letter is passing through between the trip-rolls, and is therefore forcing the platen-roll F^8 down upon the printing-roll, the momentary unlocking of the hooks $J^4 J^{11}$ will have no effect, for they will immediately reengage, and thus lock the platen-roll F^8 down upon the printing-roll, the letters being timed so that they will pass in between the platen-roll and printing-roll just before the type come into position. As this motion continues the letter is thrown out and, as previously explained, before the type get around to the platen-roll again the hooks $J^4 J^{11}$ will be again disengaged. The spring J^9 co-operates with the separated stops $J^7 J^8$ to allow the platen-roll F^8 to rise even when the two hooks $J^4 J^{11}$ are engaged—at least until the platen-roll has reached its limit of motion. This is to permit the passage of a large, heavy, or thick letter between the platen-roll and the printing-roll while at the same time permitting the trip-roll F^5 to descend upon the trip-roll F^4 to grip the next letter.

M is a wheel with the handle M' and rim M^2 , which wheel is mounted on the stud M^3 , which stud is supported on the boss M^4 in the frame part A . The inner end M^5 of the stud M^3 is screw-threaded into the bushing, which is screw-threaded into the box M^4 for adjustment. On the outer end of the shaft C^5 is mounted the friction-roll M^7 , which engages the driving-flange surface M^8 on the wheel M^2 , so that when the latter is turned the friction-roll M^7 is rotated and with it the shaft C^5 .

This constitutes the driving mechanism, though of course it might be greatly varied and could be adapted to be operated by power as well as by hand, as here indicated.

The use and operation of my invention are as follows:

Broadly considered, the devices hereinbefore specifically described by reference to the drawings may be more generally described as follows:

There is in the first place a suitable support, stand, or frame supporting, among other things, a receiver or letter-receiving part, in which the envelopes or letters are stacked.

This receiver is preferably, though of course not necessarily, inclined, and is thus adapted to hold a stack of letters and may be shaped and positioned to meet the conditions presented.

At the bottom of the receiver there is a movable or pivoted gate provided at its forward end with fingers which come up against the lower edge of the side of the receiver and which are preferably forwardly inclined at this point, so as to coact with the beveled or otherwise shaped lower edge of the side of the receiver to form a groove-like recess at the bottom of the receiver. This may be broadly called the "discharge" and is formed in this case by or between the gate and the lower edge of the side of the receiver. Associated with this gate is a feeder which is double-acting in the sense that it first acts to move the lower letter forward toward this discharge a slight distance and then continues to act to move this letter forward through the discharge. The first action of the feeder takes place when the gate is closed and forces the bottom letter forward into the groove. If the bottom letter is properly positioned, its forward edge is forced into the groove at the point where the fingers of the gate and the edge of the side of the receiver come together. Associated with the gate and the feeder is a pusher which after the first feed action impinges upon or presses against the lower letter in the pile and pushes the pile of letters along or, in this case, upwardly in the receiver. The essential action of this device is that it raises or pushes the mass of letters upward and away from the slot, and its peculiar action in this form of the device here illustrated is that it performs this pushing function through the lower letter while permitting the forward feed of such lower letter. It is therefore such a device as will not interfere with the feed action. This feed action, therefore, continues, and the gate drops down, so as to slightly separate its fingers from the lower edge of the side of the receiver. Under these conditions what was a slot becomes an open slit or discharge-way wide enough to permit the passage of the lower letter, which letter, as explained, is under the control of the feeder and though preferably impinged upon by the pusher is not arrested or affected by such pusher. The result, therefore, is that the lower letter is fed forward and out of the receiver into the printing mechanism. If for any reason the lower letter in the package is out of place, so that the first forward feed motion is not sufficient to bring it into the slot or discharge, the pusher will raise not only the general mass of letters, but also the lower letter in this form of my device, and therefore the lower letter as well as the others will be pushed beyond the slot or discharge, and when the fingers of the gate open there will be no letter in position to be fed out, but the feeding mechanism will continue to operate on the lower letter and will bring

its edge up against the inner surface of the side of the receiver, and at the next operation this letter will be in position to be fed out.

5 These devices may of course be very greatly changed without departing from the spirit of my invention and for convenience may be somewhat varied. I use the term "receiver" in its broadest sense. The "controlled discharge" means simply a discharge-way for the letter with the proper control thereof. The "gate" is simply a convenient term to indicate that there is a device to control or open and close the discharge or cause it to be opened and closed. The "feeder" is any kind of a device which will feed forward the letter to be discharged at the proper time toward the point at which it is to be discharged. The "pusher" is any sort of a device which tends to push or in this case to raise the mass of letters and to move them so that they do not register with or so that but one of them registers with the discharge-way. The feed-operating devices are such as will tend to make these several elements perform their proper functions.

In the first device here shown these several elements are made to perform a cycle of operations substantially as follows: First, the feeder moves the lower letter toward the discharge and into the slot; second, the pusher acts through the lower letter to push the other letters upward, so that the lower letter is the only letter in the slot; third, the gate opens sufficiently to let the letter pass, and, fourth, the feed continues to act to push the lower letter from beneath the mass of superimposed letters. Of course this cycle of operations could be varied to a considerable extent.

As the letter is fed out of the receiver by the feeding mechanism it passes between two rolls, one of which is preferably stationary and the other movable. I have shown and described rolls. Of course the same result might be accomplished by other mechanism. The real object of these rolls, while they do feed the letters forward, is to throw the platen-roller or one part of the printing mechanism down upon the other.

If the two parts of the printing mechanism are together all the time, it is evident that the ink from one will be transferred to the other, so that the letter which passes between them will be inked or at least marked on both sides. To obviate this, it is desirable that one part of the printing mechanism, and preferably the platen-roll, should be elevated or removed from the other part when in its normal condition. Stated in another way, it should be pressed down upon the printing-roll while the printing or cancellation is going forward and at other times should be free from the roll, and hence inoperative with relation to the printing-roll. The two trip-rollers, between which the letter has passed as it issues from the receiver, are organized so as to throw the platen-roller down upon the printing-roller when, and only when, a letter

has passed between the two rolls. This, therefore, is the first action of the printing mechanism. Broadly speaking, I have here shown a device for throwing the printing apparatus into action, which device is actuated by the letter to be printed, or, in other words, I have shown the printing-roll and platen-roll separated normally and a device adapted to throw them together when actuated by the letter to be printed or canceled; but letters are of variable thickness, and it is therefore necessary that the platen-roller or the two parts of the printing device should be elastically held, so that they can spread a considerable distance from each other while performing their functions. This is provided for in my device by an arrangement of lever-springs and associated parts. This spreading of the platen and printing rolls must, however, be independent of or must not cause the spreading of the first-named rolls. If these latter rolls are spread or separated from each other, the next issuing letter will not be seized by them, and the proper operation of the apparatus will be interfered with. I have therefore created an organization by which as soon as the two trip-rolls are actuated to throw the platen upon the printing-roll they are operated upon so as to be held in contact with each other no matter how great the spread between the platen-roll and the printing-roll, due to the thickness of the letter, may be. The letter fed through the trip-rolls, and which by this action of the trip-rolls has swung the elbow crank-lever and thus forced the platen-roll against the printing-roll, now approaches the platen-roll. At the same time the pin on the gear-wheel engages the end of the pivoted dog and momentarily disengages the two hooks of the locking mechanism. These will, however, instantly reengage if this letter is between the trip-rolls, and so the platen-roll remains locked down upon the printing-roll, and the letter is carried between them and fed by them forward for printing or cancellation. If when this action takes place there is no letter between the trip-rolls by reason of no letter having been fed from the machine, the two dogs when disengaged will remain so and the platen-roll will remain in its elevated position, free from the printing-roll, until the next action ensues. Suppose, now, the letter is a large and thick one. In passing between the printing and platen rolls it would force the latter upwardly, and unless provision were made therefor it would tend also to force the trip-rolls apart. This, however, is prevented by reason of the fact that the spring J^9 is weaker than the spring F^{12} and will give and permit the dog to move upwardly until the faces $J^8 J^7$ engage or until the limit of upward motion of the platen-roll has been reached before this action will force the trip-rolls apart. Thus even though a heavy letter is being printed the trip-rolls are ready to receive the next letter and to act upon the platen-roll to force it again toward

the printing-roll when the other letter has been released. The normal condition of the platen-roll is one of elevation, as indicated in Fig. 1, it being only depressed when a letter is received between the trip-rolls.

This part of the device properly contains the following elements: first, the trip-rolls for assisting the forward feed of the letter and for throwing the platen-roll against the printing-roll; second, a joint support for one trip-roll and the platen-roll; third, a movable support for the joint support; fourth, a platen-lock for locking the platen-roll down upon the printing-roll; fifth, a lock-release for releasing the platen-roll; sixth, a primary pressure device to hold both platen-roll and trip-roll down in engagement with their associate rolls, and a secondary pressure device to yieldingly hold the platen-roll on the printing-roll without retracting the trip-roll. These devices are constructed and related as shown, but of course could be very greatly altered, and my particular form is intended only to be, as it were, diagrammatic. As shown, they perform the following cycle of operations: First, the letter is fed forward by the trip-rolls; second, the action of the letter on the trip-roll forces the platen-roll upon the printing-roll; third, the two are locked together; fourth, this lock is interrupted so as to free the parts if no letter is in position between the trip-rolls; fifth, the trip-rolls and platen-roll are elastically held toward their associate roll; sixth, the platen-roll is permitted to recede from the printing-roll without disturbing the position of the trip-roll.

I have used the term "platen-roll" broadly to indicate a movable portion of the printing device and not to limit myself to that particular piece as being the one controlled by my mechanism.

The driving-shaft which drives the printing-roll and connected parts is itself driven, as indicated, by hand or power, and the several parts are timed so as to cause their successive operations to take place at the proper relative moment.

The reciprocating separating device, gate, and pusher, for example, are properly timed by a suitable connection with the printing or marking mechanism, so that the separation of the letters is properly timed with relation to the printing device. It will be seen that by this connection the letters will be fed to the printing device regardless of the length of the letters, and the stamp will be properly canceled and the postmark properly placed on each letter once, and only once. The pusher, which of course may be actuated in any desired manner, is adapted to press against the letter in the process of being fed and through it to push the other letters away from the discharge. When the construction of the drawings is used, the part B² acts as a stop for all of the letters except the one being fed, and in this construction it may be said that the

pusher presses against the letter in process of being fed and through it pushes the second letter in the series into proper relation with the stop each time the separating device is actuated, so as to prevent the second letter from being separated from the series of letters in the receptacle or letter-receiving part. After the separation of the lower letter has begun the motion of this letter continues without interruption until it passes through the printing device. The rolls F⁵ and F⁴ may be called an "additional" feeding device, for they engage the letter after it is partially separated and feed it toward the printing device. In the construction herein illustrated, for example, this additional feeding mechanism comprises two parts adapted to be moved relatively by the letter, one of said parts being mounted upon a movable arm or part which carries one of the printing or marking parts. The spring F¹² tends to move the pivotal point of the arm F⁷, which motion is limited by the stop K², while the spring L tends to move said arm about its pivot, and when these springs are properly adjusted the roller F⁵ is forced against the roller F⁴ when no letter is passing, and the platen-roll is lifted away from the printing-roll, so as to be normally held in an inoperative position.

I claim—

1. A letter marking or printing device, comprising a marking mechanism, a letter-receiving part adapted to receive a series of letters, a reciprocating separating device for separating the letters so that they may be delivered singly to the marking mechanism, a gate for said letter-receiving part, adapted to be alternately opened and closed to permit the exposed letter to be fed toward the marking mechanism, and an actuating connection between the marking mechanism and said feeding device and gate.

2. A letter marking or printing device comprising a receptacle adapted to receive a series of letters, a discharge therefor, a reciprocating separating device for separating one letter at a time from the series, a pusher adapted to push the other letters away from the discharge, a marking mechanism to which said letters are fed, and an actuating connection from the driving mechanism of the marking mechanism, to said separating device and pusher, whereby the feeding device and pusher are actuated for the purpose of separating one letter from the series each time the marking mechanism reaches a predetermined position.

3. A letter marking or printing device comprising a receptacle adapted to receive a series of letters, a discharge therefor, a separating device for separating one letter at a time from the series, a pusher adapted to push the other letters away from the discharge, a gate associated with the receptacle and adapted to be opened when a letter is ready to be discharged, a marking mechanism to which the letters

are fed, and an actuating connection between the marking mechanism and said feeding device, pusher and gate.

4. A letter marking or printing device comprising a letter-receiving part adapted to receive a series of letters, a discharge therefor, means for feeding one letter toward the discharge, a pusher adapted to press against the letter in process of being fed and through it to push the other letters away from the discharge, a marking or printing device to which the letters are separately fed and a timing connection between said pusher and the marking or printing device.

5. A letter marking or printing device comprising a letter-receiving part adapted to receive a series of letters, a discharge therefor, a separating device for separating one letter at a time from the series, a pusher adapted to press against the letter while it is being separated and through it to push the other letters away from the discharge, a gate associated with the letter-receiving part and adapted to be opened when the letter is ready to be discharged, a marking or printing device to which the letters are fed, and a timing connection between said marking or printing device and said pusher and gate.

6. A letter marking or printing device comprising a letter-receiving part adapted to receive a series of letters in contact with each other, a discharge therefor, a separating device for separating one letter at a time from the series, a stop associated with said receptacle, a pusher adapted to push the second letter in the series into proper relation with said stop each time said separating device is actuated so as to prevent said second letter from being separated from the series, a marking or printing device to which the letters are separately fed, and a timing connection between the marking or printing device and said separating device and pusher.

7. A letter marking or printing device comprising a printing part, a letter-receiving part adapted to receive a series of letters, a separating device for separating the letters so that they may be delivered singly to the printing part, an additional feeding device to receive the letters after separation, said additional feeding device provided with a part normally in an inoperative position which cooperates with the printing part, and which is actuated by the presence of the letter so as to be brought into operative relation with the printing part, and a locking device which holds said parts in their operative or locked position independent of the letter.

8. A letter marking or printing device comprising a printing part, a letter-receiving part adapted to receive a series of letters, a separating device for separating the letters so that they may be delivered singly to the printing part an additional feeding device adapted to receive the letters after separation, said additional feeding device provided with a part

which cooperates with the printing part, and which is actuated by the presence of the letter so as to be brought into operative relation with the printing part, a locking device for locking said parts in their operative position, and a releasing device independent of the letter for intermittently releasing the locking device.

9. A letter marking or printing device comprising two parts between which the letter is received and adapted to be moved relatively by said letter, two cooperative printing or marking parts normally separated, one of said printing or marking parts connected with one of the letter-receiving parts so as to be moved into operative relation with its cooperating part, by the letter, a locking or holding device associated with said printing or marking part and so positioned as to hold the printing or marking parts in operative relation independent of the letter.

10. A letter marking or printing device comprising two parts between which the letter is received and adapted to be moved relatively by said letter, two cooperating printing or marking parts normally separated, one of said printing or marking parts connected with one of the letter-receiving parts so as to be moved into operative relation with its cooperating part by the letter, a locking or holding device associated with said printing or marking part and so positioned as to hold the printing or marking parts in operative relation independent of the letter and a releasing device independent of the letter for intermittently releasing said locking or holding device.

11. A letter marking or printing device comprising two letter-receiving parts between which the letter passes, and adapted to be moved relatively by said letter, two cooperating printing or marking parts, a movably-mounted arm or part connecting one of the letter-receiving parts with one of the printing or marking parts, means for normally holding said arm so that the associated letter-receiving part will be pressed against its cooperating part while the associated printing or marking part will be held away from its cooperating part when no letter is being fed to the marking part, whereby when a letter is inserted between the letter-receiving parts said arm is moved so as to separate the letter-receiving part and move the printing or marking part into proper position with its cooperating part, and means for holding said arm in said latter position until the letter has been fed through the printing device.

12. A letter marking or printing device comprising two letter-receiving parts between which the letter passes, and adapted to be moved relatively by said letter, two cooperating printing or marking parts, a movably-mounted arm or part connecting one of the letter-receiving parts with one of the printing or marking parts, means for normally holding said arm so that the associated letter-re-

ceiving part will be pressed against its cooperating part while the associated printing or marking part will be held away from its cooperating part when no letter is being fed to the marking part, whereby when a letter is inserted between the letter-receiving parts said arm is moved so as to separate the letter-receiving part and move the printing or marking part into proper position with its cooperating part, means for holding said arm in said latter position until the letter has been fed through the printing device, and a releasing device for releasing said arm at predetermined intervals.

13. A letter marking or printing device comprising two letter-receiving parts, two cooperating printing or marking parts, a movably-mounted arm or piece connecting one of the letter-receiving parts with one of the printing or marking parts, two elastic devices, associated with said arm and when in action tending to move the arm in opposite directions, a stop limiting the action of one spring whereby the letter-receiving parts are normally held in contact and the printing and marking parts are normally held out of contact until a letter is received between the letter-receiving parts.

14. A letter marking or printing device comprising two letter-receiving parts, two cooperating printing or marking parts, a movably-mounted arm or piece connecting one of the letter-receiving parts with one of the printing or marking parts, two elastic devices, associated with said arm and when in action tending to move the arm in opposite directions, an adjustable stop limiting the action of one spring whereby the letter-receiving parts are normally held in contact and the printing and marking parts are normally held out of contact until a letter is received between the letter-receiving parts.

15. A letter marking or printing device comprising two letter-receiving parts, two cooperating printing or marking parts, an arm or piece connecting one of the letter-receiving parts with one of the printing or marking parts, a movable piece to which said arm is pivotally connected, a spring tending when active to move the pivotal point of said arm, a stop for limiting this movement, a second spring associated with said arm and tending to move it about its pivotal point whereby the printing or marking parts are normally held apart and are brought into operative relation when a letter is inserted between the letter-receiving parts.

16. A letter marking or printing device comprising two letter-receiving parts, two cooperating printing or marking parts, an arm or piece connecting one of the letter-receiving parts with one of the printing or marking parts, a movable piece to which said arm is pivotally connected, a spring tending when active to move the pivotal point of said arm, a stop for limiting this movement, a second spring associated with said arm and tending

to move it on its pivotal point whereby the printing or marking parts are normally held apart and are brought into operative relation when a letter is inserted between the letter-receiving parts and a holding or locking device for locking said printing or marking parts in their operative position until the letter has passed between them.

17. A letter marking or printing device comprising two letter-receiving parts, two cooperating printing or marking parts, an arm or piece connecting one of the letter-receiving parts with one of the printing or marking parts, a movable piece to which said arm is pivotally connected, a spring tending when active to move the pivotal point of said arm, a stop for limiting this movement, a second spring associated with said arm and tending to move it on its pivotal point whereby the printing or marking parts are normally held apart and are brought into operative relation when a letter is inserted between the letter-receiving parts, a holding or locking device for locking said printing or marking parts in their operative position until the letter has passed between them, said holding or locking device elastically supported so that the printing or marking parts may adjust themselves to correspond with the variations in thickness of the letters passing between them.

18. A letter marking or printing device comprising two letter-receiving parts, two cooperating printing or marking parts, an arm or piece connecting one of the letter-receiving parts with one of the printing or marking parts, a movable piece to which said arm is pivotally connected, a spring tending when active to move the pivotal point of said arm, a stop for limiting this movement, a second spring associated with said arm and tending to move it on its pivotal point whereby the printing or marking parts are normally held apart and are brought into operative relation when a letter is inserted between the letter-receiving parts, a holding or locking device for locking said printing or marking parts in their operative position until the letter has passed between them, said locking device comprising two parts movably connected together, one of said parts elastically mounted upon some part of the machine.

19. A letter marking or printing device comprising two letter-receiving parts, two cooperating printing or marking parts, an arm or piece connecting one of the letter-receiving parts with one of the printing or marking parts, a movable piece to which said arm is pivotally connected, a spring tending when active to move the pivotal point of said arm, a stop for limiting this movement, a second spring associated with said arm and tending to move it on its pivotal point whereby the printing or marking parts are normally held apart and are brought into operative relation when a letter is inserted between the letter-receiving parts, a holding or locking device

for locking said printing or marking parts in their operative position until the letter has passed between them, said locking device comprising two parts movably connected together, one of said parts elastically mounted upon some part of the machine, and an engaging device associated with the moving part of the machine and adapted to periodically engage one part of the locking device and move it to an inoperative position.

JUSTIN KAY TOLES.

Witnesses:

FRANCIS W. PARKER,
HOMER L. KRAFT.