

March 17, 1931.

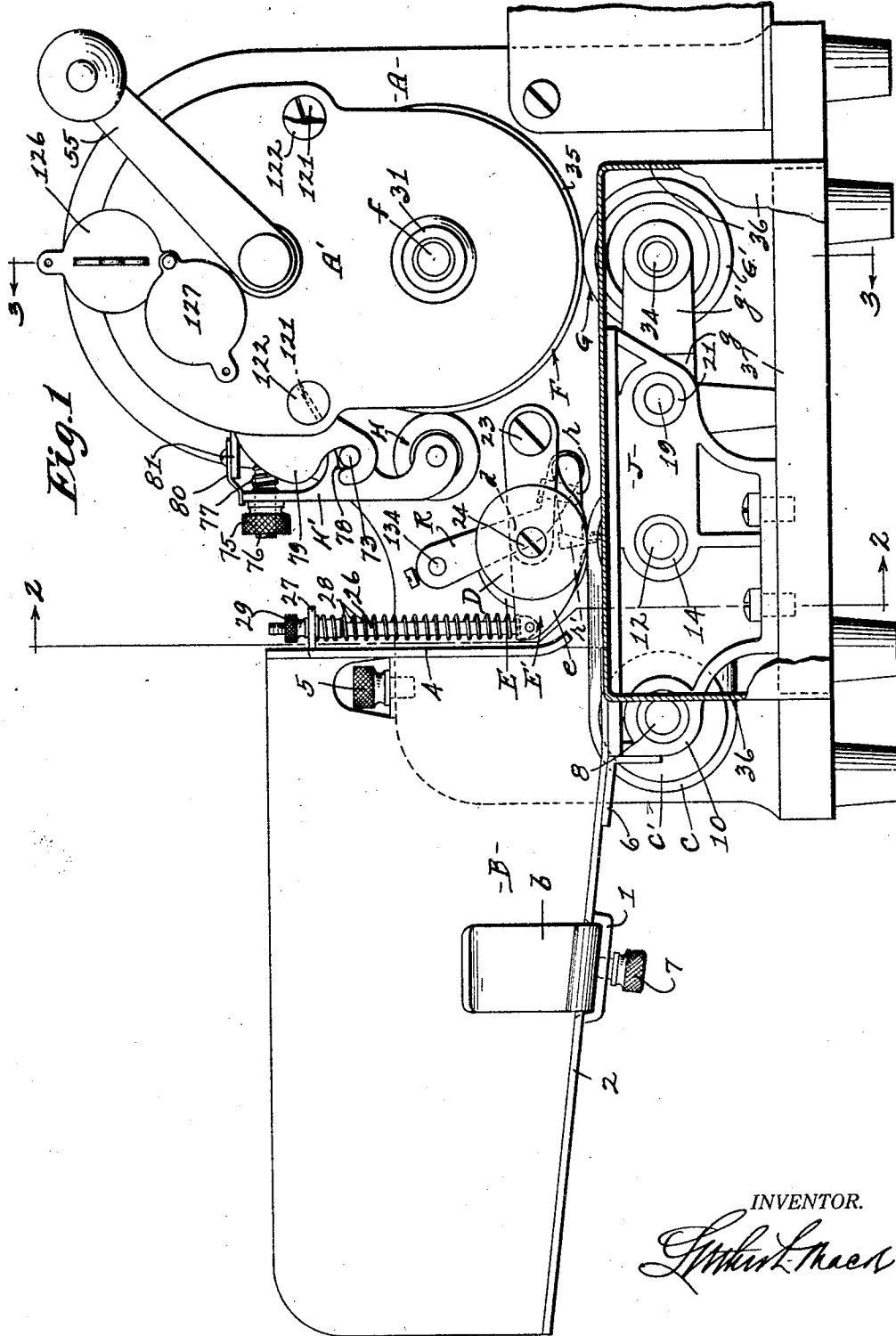
L. L. MACK

1,796,296

POSTAGE METER

Filed Oct. 29, 1928

6 Sheets-Sheet 1



March 17, 1931.

L. L. MACK

1,796,296

POSTAGE METER

Filed Oct. 29, 1928

6 Sheets-Sheet 2

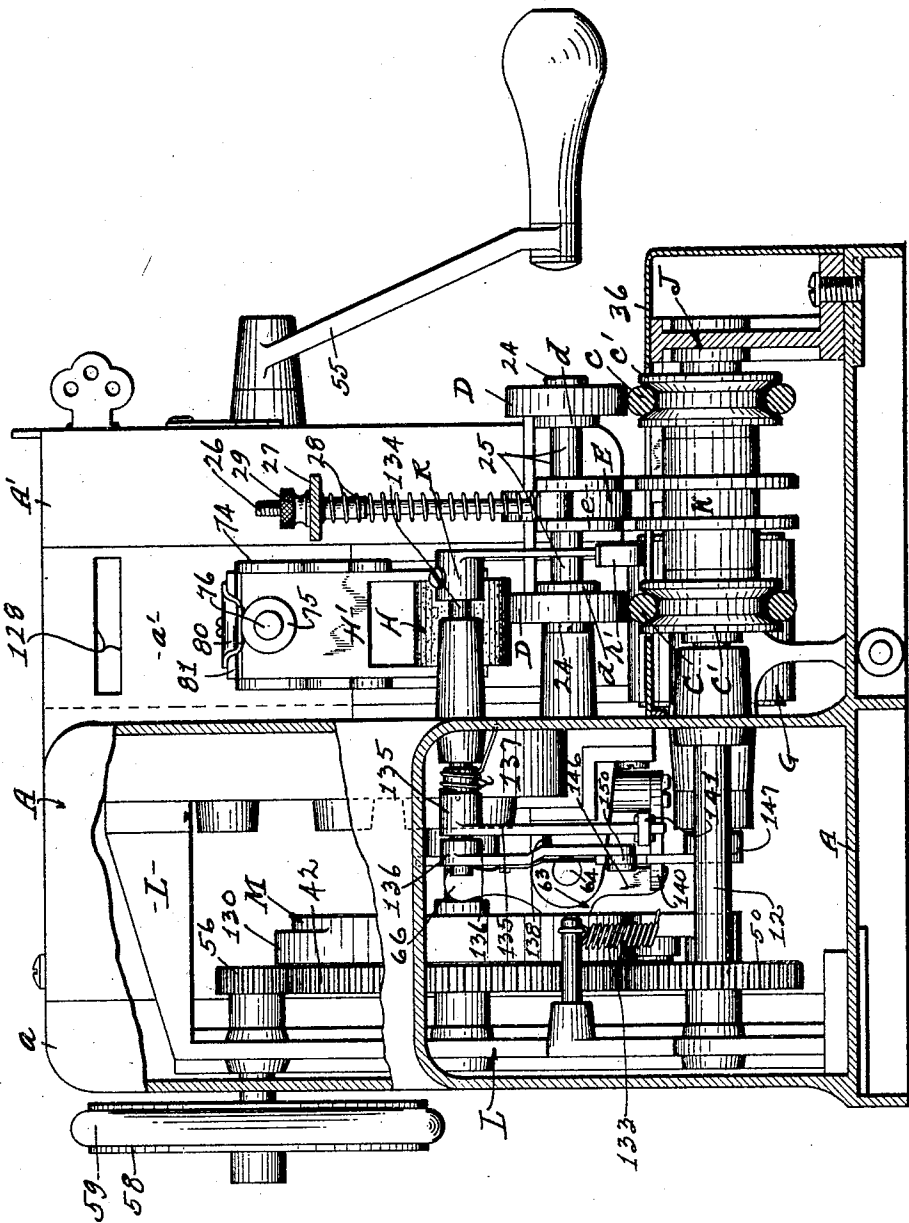


Fig. 2

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March 17, 1931.

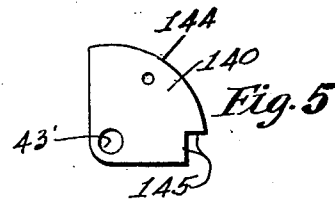
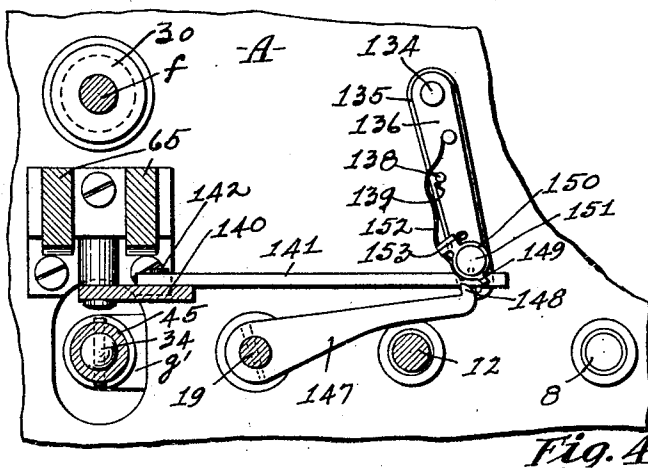
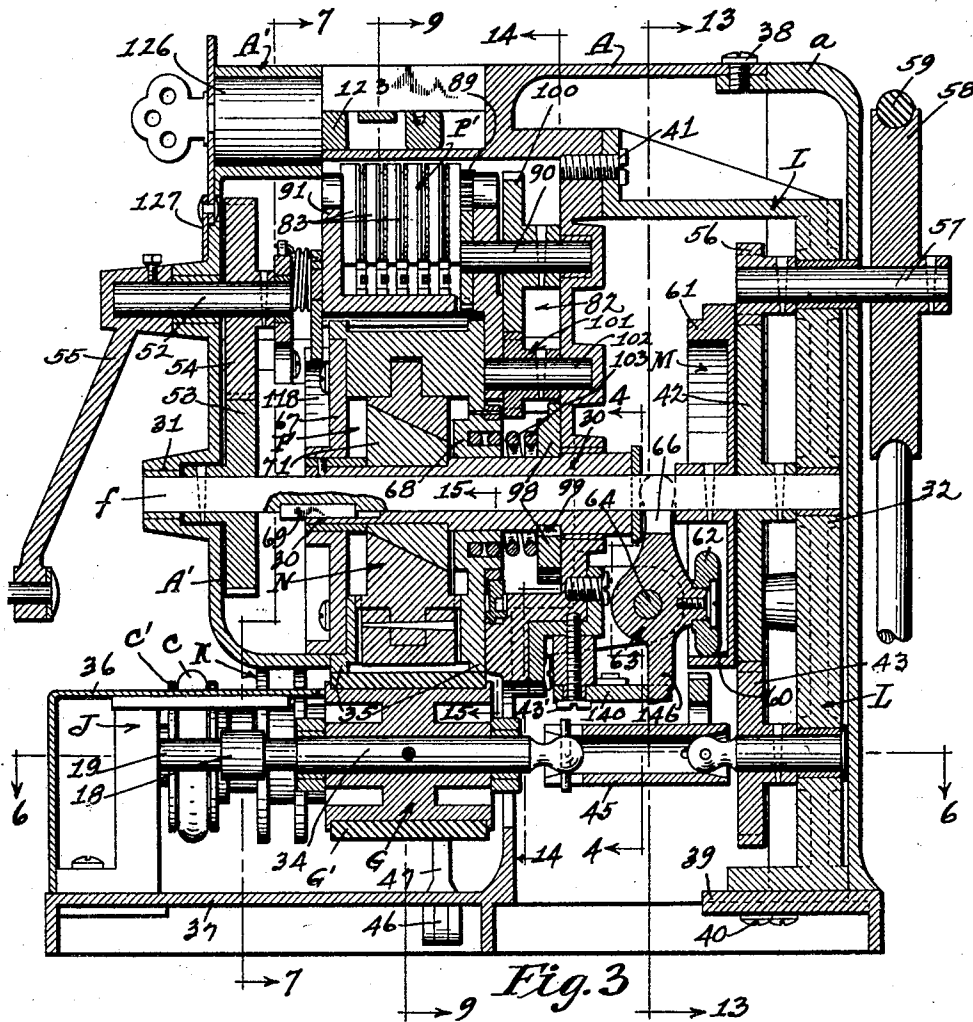
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POSTAGE METER

Filed Oct. 29, 1928

6 Sheets-Sheet 4

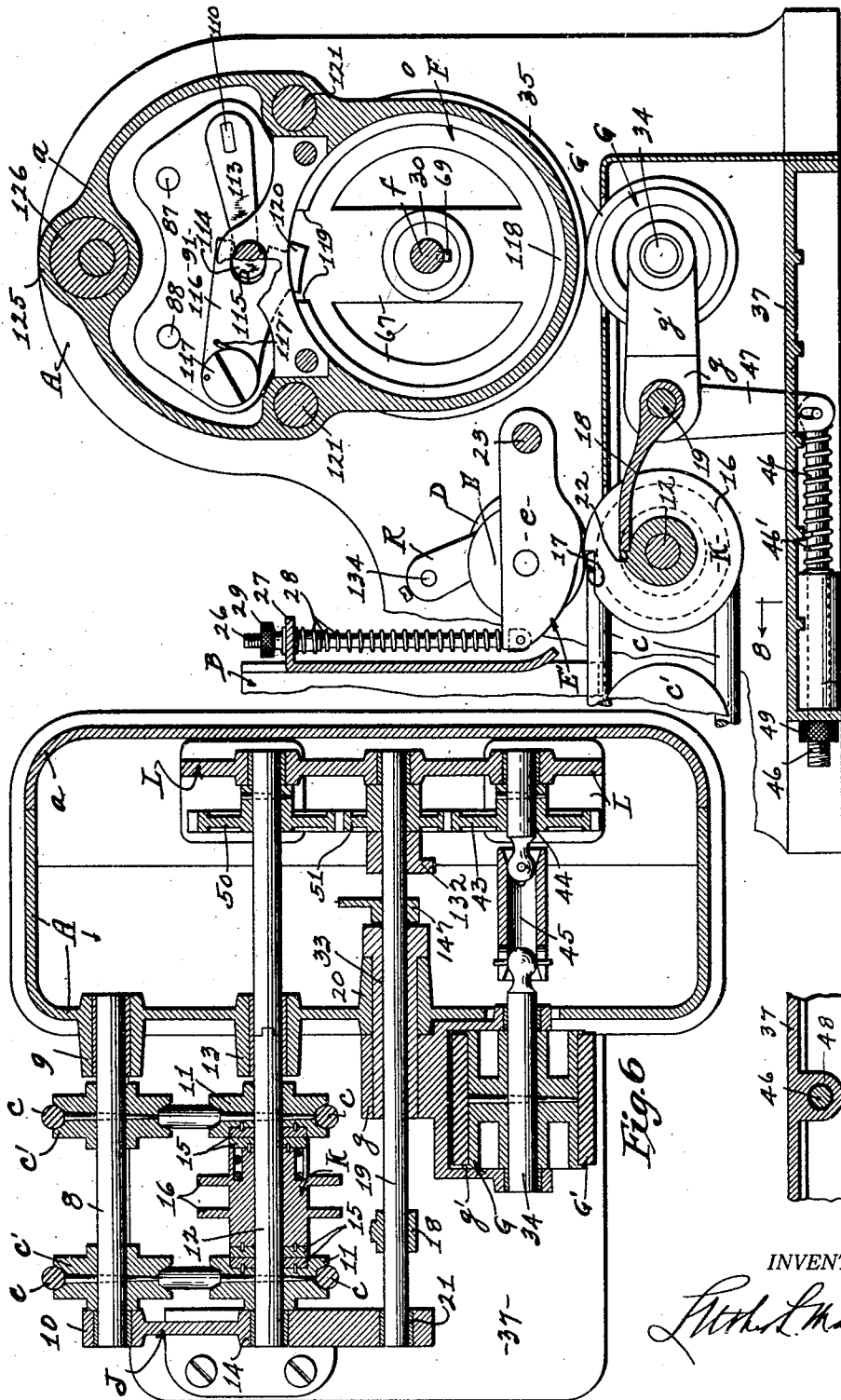


Fig. 6

Fig. 7

Fig. 8

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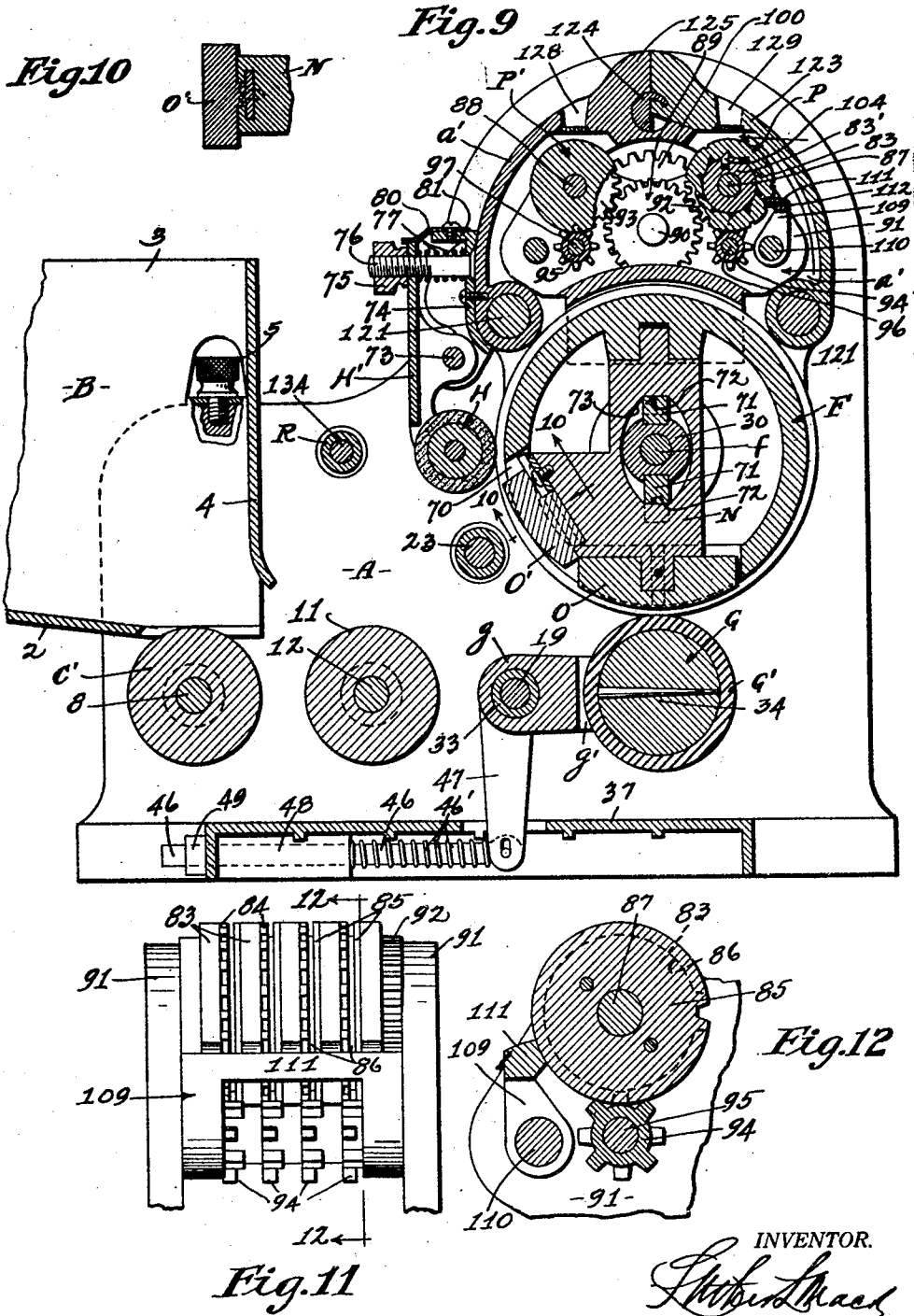
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POSTAGE METER

Filed Oct. 29, 1928

6 Sheets-Sheet 5



March 17, 1931.

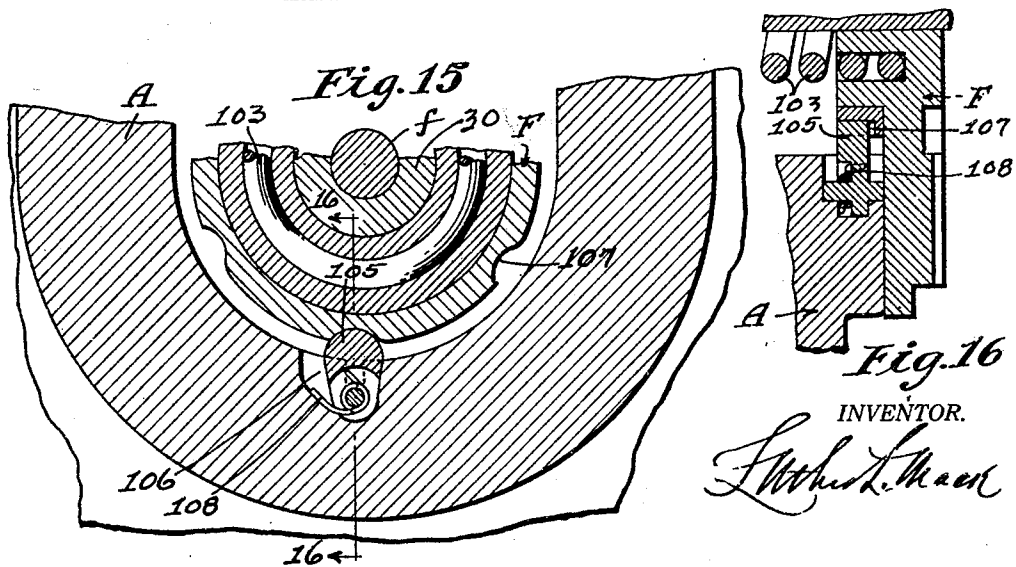
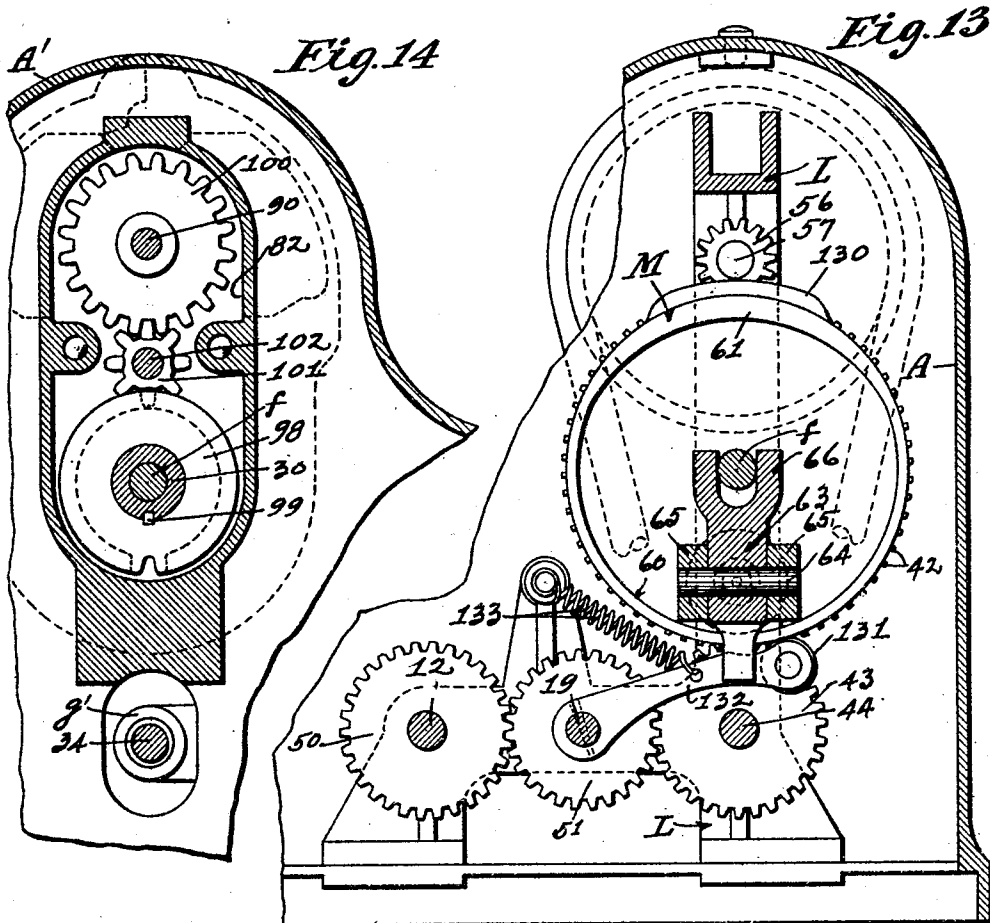
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1,796,296

POSTAGE METER

Filed Oct. 29, 1928

6 Sheets-Sheet 6



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UNITED STATES PATENT OFFICE

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POSTAGE METER

Application filed October 29, 1928. Serial No. 315,617.

This invention relates to and has for a main object the provision of a simplified and improved type of postage meter, capable of being operated manually or by means of an electric motor, and arranged to be set to print an authorized and predetermined number of postage stamp impressions and to automatically lock when the authorized number of impressions has been made.

An object is to provide a compact machine of minimum weight and size embodying a continuously rotatable printing cylinder with a printing die reciprocally mounted thereon, means controlled by the printing cylinder for feeding successive pieces of mail matter to and from printing position, means controlled by the advance of the mail matter to printing position for regulating and effecting the operation of the printing die, and means controlled by the operation of the printing die for registering successive pieces of mail matter simultaneously on two separate registers, one of ascending and one of descending scale.

A further object is to provide means for locking the printing cylinder against rotation and the descending register against further operation when a predetermined number of stamp impressions has been made.

Another object is to provide means for printing but one impression on a single piece of mail matter, regardless of its length.

Another object is to provide means for locking the meter against unauthorized access.

Other objects will appear as the description progresses.

In consideration of the present invention, attention is called to Letters Patent Nos. 1,527,365 and 1,527,366, dated Feb. 24, 1925, which have been granted to me for improvements in mail marking machines and postage meters, respectively.

I have shown a preferred form of device in the accompanying drawings, in which:

Fig. 1 is a front elevation.

Fig. 2 is a sectional elevation on line 2—2 of Fig. 1.

Fig. 3 is a sectional elevation on line 3—3 of Fig. 1.

Fig. 4 is a sectional elevation on line 4—4 of Fig. 3.

Fig. 5 is a plan of a locking member for locking the printing means in operative position.

Fig. 6 is a sectional plan of the machine on line 6—6 of Fig. 3.

Fig. 7 is a sectional elevation on line 7—7 of Fig. 3.

Fig. 8 is a fragmentary section on line 8—8 of Fig. 7.

Fig. 9 is a sectional elevation on line 9—9 of Fig. 3.

Fig. 10 is a section of the printing means on line 10—10 of Fig. 9.

Fig. 11 is a side elevation of the descending register and locking means therefor;

Fig. 12 is a section of the same on line 12—12 of Fig. 11.

Fig. 13 is a sectional elevation of the machine on line 13—13 of Fig. 3.

Fig. 14 is a section of the same on line 14—14 of Fig. 3.

Fig. 15 is a fragmentary section on line 15—15 of Fig. 3.

Fig. 16 is a fragmentary section on line 16—16 of Fig. 15.

Briefly described, my machine includes a suitable base A on which is mounted a feed plate or receptacle B adapted to hold a stack of cards or letters preparatory to a stamping and sealing operation, from which the mail matter is moved by means of a pair of feed belts C, C beneath rollers D, D and a separating device E, to printing position between a printing cylinder F and an impression roller G. The printing means may be inked by means of a suitable inking mechanism as at H.

The feed receptacle B has a laterally adjustable guide b movable in a channel, or channels 1 formed on the bottom plate 2 thereof and spaced from the face plate 3 which is vertically disposed. Thus a stack of letters may be held between the plate 3 and the guide b in longitudinal alinement with the printing means to be hereinafter described. Receptacle 2 also has a forwardly bent end plate 4 with which the forward edges of the mail matter contact and between the lower edge of which and the plate 2 the mail matter is moved to printing position. Recep-

tacle B may be attached to the base A by means of a screw 5 and to a bracket J by an angle plate 6, or otherwise. Guide *b* may be locked in adjusted position on plate 2 by means of a set screw 7, or otherwise.

The feed belts C, C are continuous and operate over a pair of idler pulleys C', C' carried on a shaft 8 which is journaled in bearings 9 and 10, respectively, in the base A and the bracket J. Said belts are driven by means of pulleys 11, 11 on a shaft 12 which is journaled in bearings 13 and 14, respectively, in said base and said bracket. Pulleys 11, 11 are frictionally connected with an intermediate feed roller K by means of sets of friction discs 15, 15 etc. carried on shaft 12, so that when the pulleys are fixed to the shaft the roller K will be driven thereby. Roller K has a pair of laterally spaced annular flanges 16, 16 which are provided with laterally opposite and corresponding peripheral notches 17, 17 with vertical shoulders, as shown in Fig. 7, adapted to be engaged by the forward edges of the pieces of mail matter, in succession, for accurately timing the mail matter with the printing means.

Roller K is normally prevented from rotating by means of a latch arm 18 which is carried on a shaft 19 journaled in bearings 20 and 21, respectively, in the base A and the bracket J. Said arm engages a shoulder 22 on the hub of the roller K and prevents the rotation of the roller except when the shaft 19 is oscillated to release the latch arm 18. The idler forwarding rollers D, D are mounted over and in contact with the belts C, C and are carried on arms *d*, *d* which are pivotally held on the face of the base A by means of a stud or screw 23, the rollers being rotatably held on the arms *d*, *d* by means of screws 24, 24 and yieldable relative to the belts C, C by means of springs 25, 25 carried on the screw 23 and having their outer ends overlying the arms and their inner ends attached to the screw, or otherwise.

The separator E embodies a circular disc of rubber or the like stationarily held between the flanges *e*, *e* of an arm E' which is also pivoted on the screw 23. The flanges *e*, *e* overlie the portions 16, 16 of the feed roller K and the disc E overlies the space between the portions 16, 16. Flanges *e*, *e* are so formed that only a small portion of the periphery of the disc E is exposed below the edges of the flanges for engagement with the upper surfaces of the pieces of mail matter for preventing but one card or letter at a time to enter the grip of the belts C, C and rollers D, D.

The left hand portion of arm E' is pivotally connected with an adjusting screw 26 which is slidably held in a portion 27 bent outwardly from the feed plate 4, and carries a compression spring 28 between the arm E'

and the portion 27, for yieldably supporting the separator relative to the roller K. An adjustment nut 29 is carried on the upper end of screw 26 for adjusting and limiting the downward movement of the separator, so as to vary the space between the separator and feed roller to correspond to various thicknesses of mail matter.

The printing cylinder F is fixed to a master shaft *f* and is rotatably held between the base A and a meter cover A' with its periphery disposed tangentially to the path of the mail matter through the machine. Shaft *f* is journaled in a sleeve 30 which is slidable in the base A and in a bearing 31 in the meter cover A' and also at its rear end in a bearing 32 formed on a bracket L.

Bearing 20 has a sleeve 33 which encompasses the shaft 19 and oscillatably carries an arm *g* which has a yoke *g'* on its free end between the furcations of which the impression roller G is operably mounted in opposition to the printing cylinder F, as shown in Figs. 1 and 6. Roller G has a frictional band G' of rubber or the like thereon and is held on a section of shaft 34 which is journaled in the opposite arms of the yoke *g'*.

It will be noted that the cylinder F has a pair of annular flanges 35, 35 on the periphery thereof which contact with the band G' of the roller G, between which flanges and said roller the mail matter is frictionally held and moved through and from printing position. A suitable thin metal bed plate 36 is mounted on an extension 37 of the base A and is attached thereto for forming a flat surface over which the mail matter is moved through the machine and from which the same is discharged by the rollers G subsequent to the printing operations into a suitable receptacle or carrier.

Base A has a rearwardly extended overhanging portion which is closed by means of a cover *a* adapted to be attached thereto by means of screws 38, or otherwise. Thus the base supports and encloses all of the operating gears, cams and the like at the rear of the machine, as shown in Fig. 3. The bracket L is mounted on a flat portion and is secured there by means of screws 40, 40, etc. Said bracket is also attached at its upper end to the web of the base A by means of screws 41.

The master shaft *f* carries a gear 42 which meshes with a smaller gear 43 on a section of shaft 44 journaled in the bracket L. Shaft sections 34 and 44 are universally connected together by means of a coupling 45 which permits the adjustment of the impression roller G relative to the printing cylinder F. Said adjustment is regulated by means of a screw 46 which pivotally connects with an arm 47 of yoke *g'* and is slidable in a boss 48 on the bottom of extension 37. Screw 46 carries one or more nuts 49 on the outer end thereof for adjusting the position of the im-

pression roller G relative to the cylinder F and for limiting the space between said rollers to correspond to the thickness of the mail matter. A compression spring 46' is held on screw 46 between the arm 47 and lug 48 for yieldably supporting the roller G in printing position.

Shaft 12 carries a gear 50 which connects with and is driven by the gear 43 by means of an idler gear 51 loosely held on shaft 19 or concentrically mounted with respect thereto. The forward end of shaft f may connect with a shorter shaft 52 journaled in a bearing of the meter cover A', as shown in Fig. 3, by means of gears 53 and 54 carried on said shafts, respectively. Shaft 52 may have a crank 55 detachably held on its extended outer end by means of which the machine may be manually operated. Also master gear 42 may connect with a pinion 56 held on a shaft 57 which is operably held on the bracket L and has a driven pulley 58 thereon adapted to be connected with a source of power by means of a belt 59.

Inwardly of the gear 42 I provide a master cam M which has an internal concentric face 60 and a continuing rise 61 adapted to be engaged by a roller follower 62 which is carried on a lever 63. Said lever is pivotally held on a pin 64 held in lugs 65, 65 between which the lever is mounted. The upper portion of the lever has a yoke 66 which straddles the shaft f and engages the rear end of the reciprocable sleeve 30 and the sleeve is slidably held in bearings 67 and 68 of the cylinder F. Said sleeve is suitably fixed to the cylinder F and to the shaft f by means of keys, as at 69, or otherwise.

Cylinder F is internally provided with a radially slidable die carrier N on which a stamping die O is fixedly held and a dater O' is detachably held, as shown in Fig. 9. Said dies are extensible through an opening 70 in the periphery of cylinder F between the flanges 35, 35. Sleeve 30 carries a pair of oppositely extended and correspondingly tapered wedges 71, 71 which engage oppositely formed tapered faces 72, 72 at the ends of a central opening 73 in the die carrier N through which the sleeve 30 extends. Thus the movement of the sleeve 30 relative to the cylinder F will correspondingly extend and retract the dies O and O' so that their arcuate peripheries will aline with the peripheries of the flanges 35, 35 for a printing operation. Cylinder F has a removable cap F' for affording access to the interior thereof for the purpose of assembling the cylinder.

Cylinder F operates between the face of the base A and the rear side of the cover A', for the purpose of enclosing the printing dies against access throughout a major portion of the revolutions of the cylinder, as shown in Fig. 9. Ink is supplied to the printing dies by means of the inking roller H, of absorbent

material, which is rotatably mounted on a bracket H' which is pivotally held on a pin 73, said pin being carried by a hanger 74 attached to the side of the meter housing a'. Bracket H' is adjustable relative to the printing dies by means of a nut 75 threaded on an outwardly projecting stud 76 on which a compression spring 77 is held for yieldably holding the inker in inking position. Pin 73 is preferably held in slots 78, 78 in the sides 79, 79 of the hanger 74, so that the inker may be readily removed for re-inking. To this end a flat spring 80 is attached to a lug 81 on the hanger which engages the upper end of the bracket, H' for retaining the inker in operative position, but removable for releasing the same, at will.

Base A has a countersunk chamber 82 therein between the cylinder F and the web, in which I provide a train of gears for operably connecting the printing mechanism with a pair of registers P and P'. Thus each time a stamp impression is made both of the registers P and P' will be correspondingly actuated, but in opposite directions, for increasing the total of the ascending register and decreasing the total of the descending register. The two registers are similar except that the descending register is arranged to be reset while the ascending register not only cannot be reset, but is actually inaccessible to anyone for any purpose without disassembling the machine.

Each register is composed of a plurality of counters in the form of discs, as at 83, 83, etc., with spur gears 84 on one of their sides and single notched discs 85 on their opposite sides, and intermittent gears 86 having but two teeth intermediate the members 84 and 85, in each case. The counters in each set are of any number and are arranged in sequences of units, tens, hundreds, thousands, etc. The units counters are fixed to the supporting shafts 87 and 88 respectively, and the two shafts are commonly driven by means of an idler gear 89 carried on a pin 90 in the supporting bracket 91, gears 92 and 93, respectively, being provided on shafts 87 and 88 which mesh with the idler, as shown in Fig. 9.

Each register has a plurality of pinions 94, and 95, respectively, with alternating long and short teeth which engage the gears 84, 85 and 86, as shown in Fig. 11. Thus the count of the registers is advanced and transferred from units to tens, tens to hundreds, etc. in a manner similar to the operation of a speedometer register. Pinions 94 and 95 are carried on shafts 96 and 97.

Sleeve 30 has an intermittent gear disc 98 fixed thereto by means of a key 99, the forward portion of which has two teeth and corresponds to the gears 86 of the registers, and the rear portion of which corresponds to the discs 85 of the registers. Within the chamber

82 the gear 98 is operably connected with the shaft 90 by means of a pinion 101 held on a shaft 102 and a gear 100 on the inner end of a shaft 90, as shown in Fig. 14. Pinion 101 corresponds to the pinions 94 and 95 of the registers P and P'.

As shown in Fig. 3, the gear 98 normally disengages the short teeth of pinion 101 but is in continuous engagement with the long teeth thereof, so that until the sleeve 30 and gear 98 are moved to the left the mechanism is not operative for actuating the registers P and P'. Said sleeve and gear are urged into inoperative position by a compression spring 103 confined between the bottom of the cylinder F and the gear 98.

When, however, the sleeve 30 is moved by the yoke 66 to the left, as seen in Fig. 3, against the tension of the spring 103, in which position it is adapted to be held by the cam M for a portion of a revolution prior to, during, and subsequent to a printing operation, gear 98 will engage and rotate pinion 101 for one-fourth of a revolution, gears 89, 92, 93 and 100 each one-tenth of a revolution, and thus actuate the counters of the registers correspondingly. Thus the actual counting of the stamp impressions is accomplished only when, as, and during the time the printing dies are extended from the cylinder F, and not otherwise.

Register P has its counters 83 annularly formed with ratchet teeth internally thereof and adapted to be engaged by pawls 104 extensibly held in recesses in smaller discs 83' so that each of the counters of the descending scale may be moved in a counter clockwise direction for resetting or setting to any desired number.

As shown in Figs. 15 and 16, the cylinder F is arranged so that it may not under any conditions be rotated reversely of its operating direction. This is effected by means of a yieldable pawl 105 mounted in a recess in the wall of the chamber 82 for frictional engagement with the periphery of the cylinder F within said chamber. Said cylinder has a plurality of peripheral recesses 107 which, when the cylinder is rotated in a clockwise direction, as seen in Fig. 15, move by the pawl 105, but when the cylinder is reversely rotated the pawl will lock in the first of said recesses which is moved into engagement therewith, and will prevent the further and continued rotation of the cylinder. The pawl may be urged into frictional locking engagement with the cylinder by means of a spring 108 arranged as shown or otherwise.

It is necessary to prevent the reverse rotation of the printing cylinder for more than a slight distance at all times, and further to positively lock the cylinder against rotation and the registers against operation when the descending register has reached zero. Accordingly the meter housing is provided with

a locking dog 109 fixed to a shaft 110 carried in the bracket 91. Said dog has a central bar 111 which is adapted to seat in notches 112 in all of the counters 83 of the descending register P when the said register reads "0".

On the outer side of bracket 91 the shaft 110 carries an arm 113 with an end portion 114 which engages a slot 115 in a locking arm 116 pivotally held on a screw 117. The cap 67 of cylinder F has an annular rib 118 with a gap 119 therein at a given point into which the portion 120 of arm 116 will fall when the dog 109 seats in the notches 112 of the register. Thus cylinder F may not be rotated again until the same is unlocked by proper authorization. A spring 117' tensions the lever 113 and 116 for movement into locking position.

The meter cover A' is attached to the base A by means of a pair of screws 121, 121 and the heads thereof are sealed over with a welded or molded closure, as at 122, so that access to the meter case cannot be had without breaking the seals. Provision is made, however, for affording access to the meter case for setting the register P. Such means comprises a door 123 hinged on to one of the screws 121 and locked at its free end by means of a revoluble cylinder 124 carried in a boss 125 and connected with a permutation lock 126 which is covered by a swivel plate 127 adapted to be sealed so as to enclose the key slot of the lock.

The meter case a' and the door 123 have glass covered apertures 128 and 129 through which the registers are visible and may be read for ascertaining the count thereof.

Shaft 19 is rocked for releasing the latch 18 from the feed roller K by means of the master cam M which has an external segment 130 adapted to engage a roller 131 on a follower 132 which is fixed to shaft 19 rearwardly of the web base A. Arm 132 is spring held in engagement with the cam by means of a tension spring 133. The movement of mail matter through the machine, one piece at a time, in succession, for each revolution of the shaft f, is regulated and effected by means of an actuating mechanism including an external arm R carried on a shaft 134 in the base A and an associated trip lever r, which arms depend from their common axis to the right, as seen in Fig. 1, between the arm E' and the rear arm d. Trip r is pivotally held on the lower end of the arm R and has an abutment r' disposed between the roller K and the inner pulley 11 so that its edge rests below the plane of contact of the rollers D, D with the feed belts C, C.

The belts C continuously exert friction on the lower surfaces of the pieces of mail matter while the separator E exerts a friction on all pieces above the bottom piece, which tends to retard the upper pieces and to permit the lowest pieces in succession to move to printing position. The mail matter is

moved forwardly by the belts C until the forward edges thereof engage the shoulders of the notches 17 in the roller K while said roller is held stationary by the latch 18 until a predetermined time during the revolution of the cylinder F, at which time the roller K rotates and permits the mail matter to move between the rollers D, D and belts C, C, and against the abutment r' of the actuator. Pressure on the arm r rocks the arms R and r to the left and in the direction of movement of the mail matter, until the lower edge of the abutment r' is elevated above the moving piece of matter, whereupon the arms R and r are retracted to normal position by spring pressure from behind the web of the base A, as hereinafter described and shown in Fig. 2.

Shaft 134 has two arms 135 and 136 rearwardly of the web of base A, and the arm 136 is fixed to said shaft while arm 135 is loose thereon. Arm 135 carries a spring 137 on its hub which has its opposite ends resting against the arm and a portion of the web of the base A, as shown in Fig. 2, for tensioning the arm and shaft 134 for operation as described. The arm 136 is differentially connected with arm 135 by means of a pin 138 engaging a slot 139 on the inner edge of arm 136. Thus the movement of arm 136 will correspondingly move arm 135 as each piece of mail matter is advanced to printing position, but shaft 134, arm 136 and arms R and r may be restored to normal positions independently of the arm 135.

Arm 135 is connected with a cam 140 by means of a bar 141 which is pivoted to said cam at 142. Cam 140 is pivotally held on a portion of the wall of chamber 82 by means of a screw 143 and is provided with a sector having a concentric edge 144 and a cut away portion 145 adapted to engage the inner side of a depending lug 146 on the operating lever 63 (see Fig. 3).

Lug 146 normally rests in the portion 145 of the cam 140 but when the cam M operates to move the lever 63 and sleeve 30 at a given point in each revolution of cylinder F, and when an ingoing piece of mail matter moves the actuator R, arms 135 and 136 are moved forwardly, and cam 140 is moved so that the portion 144 of the cam engages the lug 146 of lever 63. This action locks the lever 63 and sleeve 30 in extended position for a short period of time only if no piece of mail matter has entered the grip of rollers D, D and belts C, C and for a period of time sufficient to complete a printing operation if a piece of matter enters the grip of said rollers.

In the former case, both arms 135 and 136 are restored together, but in the latter case, the arm 136 will be restored after a period of time sufficient to insure a piece of matter moving into position beneath the trip

r , while arm 135 will be locked in extended position with the cam 140 and lever 63.

When roller K is unlatched by the retraction of latch 18, an arm 147 on the rear end of shaft 19 will be moved upwardly as seen in Fig. 4, so that a hook 148 on its end will interfere with a lug 149 on a pawl 150 carried on the end of lever 136 and pivoted by means of a screw 151. Said pawl is normally held in the position shown in Fig. 4 by means of a spring 152 supported on the lever 136 so that its upper end engages a pin 153 in said lever. The pawl, however, is movable in a counter-clockwise direction against the tension of spring 152.

The normal positions of arm 147 and pawl 151 are such that the lug 149 may move to the left over the hook 148 on the arm, but not to the right until the restoration of the arm 147 and lever 136. The purpose of the pawl connection with arm 147 is to hold the actuator up momentarily while a piece of mail matter moves beneath the abutment r' , whereupon the same may be restored so as to retard the entry of a succeeding piece of matter until proper time.

In operation, a stack of letters or cards is placed in the feed receptacle B with their inner edges in contact with the face plate 3 and the outer edges of the lowermost pieces in slight contact with the adjustable guide b , for alinement with the printing mechanism. The forward edges of the letters are in contact with the transverse plate 4, so that when the crank 55, or pulley 58 is operated, the pieces of matter will feed from the bottom of the stack, one at a time, in regular succession, by means of the friction belts C, C and beneath the lower edge of plate 4, into contact with the rollers D, D and E.

The front edge of each piece of matter, in turn, is stopped by engagement with the shoulders of the notches 17 in the feed roller K which is normally stationary. The letters above the lowermost ones are retarded from entrance into the grip of the rollers D, D and belts C, C by means of the friction of the stationary separator member E. When and as the cam M operates to release the arm 18 the friction driven roller K rotates for one complete revolution only, permitting the successive pieces of matter to advance single file to the grip of the roller G and the cylinder F.

The movement of the matter against the actuator member r swings the arms R, 135 and 136 to the right, as seen in Figs. 1 and 4, and causes the cam 140 to seat behind the lug 146 of the lever 63 after said lever has been just previously operated by cam M. Thus the sleeve 30 and printing dies O and O' are held extended to printing position as long as cam 140 is held in locking position and for a time sufficient to complete a printing operation, and the letters are further advanced through printing position and are

discharged from the members F and G subsequent to each printing operation.

In the meantime the arms 136 and R are restored by the tension of spring 137 to normal positions almost immediately after their operation to the right by the entrance of a piece of matter and in readiness to intercept a subsequent piece for effecting a subsequent operation of the printing means.

The machine is so timed that the dies O and O' will be extended at points slightly in advance of the inker H so that in the further rotation of cylinder F the surface of the dies may be coated with ink preceding printing operations.

The meter is arranged to be locked by postal officials by whom the keys are retained at all times, and the lock is sealed against unauthorized access so as to give evidence of tampering with the mechanism. The register P may be set by the officials for any desired number of impressions within the range thereof, and subsequent printing operations will be subtracted from the original reading, while such impressions will be added to the original reading of the register P'.

When the register P reaches "0" on all of the counters thereof the locking dog 109 will fall into locking engagement therewith and will prevent the further rotation of the registers. Also at such time the cylinder lock 120 will operatively engage the space 119 of the cylinder cap 67 and prevent the further rotation of the printing cylinder until the same has been released and the meter reset. The detent 105, as described, prevents the reverse movement of member F at all times.

It is to be noted that all mechanism which is vital to the secrecy and safety of the meter is permanently enclosed in a sealed housing against unauthorized access for any purpose except resetting by proper officials and authority, and tampering with the parts exposed, or within the housing will not affect or impair these safety factors, in so far as a loss to the Government is concerned. Any tampering with such parts will only cheat the user.

What I claim, is:

1. A postage meter comprising a rotatable printing member, means for feeding mail matter in succession to the printing means, means normally holding the printing means inoperative, means for rendering the printing means operative once in each revolution thereof, and means controlled by the passage of the mail matter to printing position for locking the printing means in operative position during a printing operation.

2. A postage meter comprising rotatable printing means normally held against contact with the matter to be printed, means for feeding successive pieces of matter to printing position, means controlled by the movement of the matter to printing position for

locking the printing means in printing position prior to and during a printing operation.

3. A postage meter comprising rotatable printing means normally held against contact with the matter to be printed, means for feeding successive pieces of matter to printing position, means controlled by the movement of the matter to printing position for locking the printing means in printing position prior to and during a printing operation, and means for inking the printing means while the same is operatively held prior to reaching printing position.

4. A postage meter comprising a continuously rotatable printing means normally held against contact with the matter to be printed, means for feeding successive pieces of matter to printing position, means controlled by the movement of the matter to printing position for rendering the printing means operative prior to reaching printing position, means for locking the printing means in operative position prior to and during a printing operation, and means permitting the restoration of the controlling means prior to the unlocking of the printing means.

5. A postage meter comprising a continuously rotatable printing member having a fixed axis, printing means receptacle thereon, means for feeding successive pieces of mail matter to the printing means, means for operatively and inoperatively supporting the printing means throughout different portions of each revolution in extended and retracted positions, and means controlled by the movement of the matter to printing position for rendering the printing means extended for longer intervals when matter is advanced to printing position.

6. A postage meter comprising a continuously rotatable printing member, printing means extensibly held thereon, means for feeding a piece of mail matter to and at each revolution of the printing means, means for extensibly and retractably supporting the printing means relative to the mail matter for different intervals during each revolution thereof, and means controlled by the movement of the matter to printing position for lengthening the intervals during which the printing means is extending, for effective printing operations.

7. A postage meter comprising a continuously rotatable printing member, printing means extensibly held on said member, means controlled by the rotation of the printing means for feeding successive pieces of matter to the printing means, means normally supporting the printing means out of contact with the mail matter, and means controlled by the movement of the matter to printing position for extending the printing means to and supporting the same in position for contact with the matter for printing indicia on said matter.

8. A postage meter comprising a continuously rotatable printing member having a fixed axis, printing dies extensibly mounted thereon, means for feeding successive pieces of matter to the printing member, means controlled by the movement of the matter to printing position for extending said dies to operative position relative to the matter and for retracting said dies during a portion of each revolution of the printing member.

9. A postage meter comprising a continuously rotatable printing member, printing dies extensibly mounted thereon, means for feeding successive pieces of matter to the printing member, means controlled by the movement of the matter to printing position for extending said dies to operative position relative to the matter and for retracting said dies during a portion of each revolution of the printing member, and means controlled by the rotation of the printing member for feeding but a single piece of mail matter to printing position at predetermined points in each revolution of the printing member.

10. A postage meter comprising a rotatable printing cylinder, printing dies extensibly held thereon, means for feeding mail matter to the printing means, means controlled by the movement of the matter to printing position for extending said dies to and retracting the same from operative positions at predetermined points in their revolution, means controlled by the rotation of the printing means for feeding but a single piece of matter at each revolution thereof, and means for inking the dies while they are so extended and prior to the printing operations.

11. A postage meter comprising a rotatable printing cylinder, printing means extensibly mounted thereon, means for normally supporting the printing means in retracted position, means for feeding mail matter to the printing means, means controlled by the movement of the matter to printing position for extending said dies prior to their movement to printing position, and means controlled by the rotation of the printing means for feeding the mail matter one piece at a time for each revolution of the printing means to printing position.

12. A postage meter comprising a rotatable printing member, printing means extensibly held thereon, means for normally supporting the printing means in retracted position, means for extending and retracting the printing means during each revolution thereof, means for feeding successive pieces of mail matter to printing position, said feeding means controlled by the printing member, and means controlled by the movement of the matter to printing position for supporting the printing means in extended position for longer than a normal

period of time when each piece of matter is advanced to printing position.

13. A postage meter comprising a rotatable printing member, printing means extensibly mounted thereon, means for extending and retracting the printing means during each revolution thereof, means for feeding successive pieces of matter to printing position, said feeding means controlled by the printing member, means for supporting the printing means in extended position for more than a normal period of time when a piece of matter is in printing position, and means controlled by the movement of the matter to printing position for locking said printing means in extended position.

14. A postage meter comprising a rotatable printing member with extensible printing dies thereon, means for extending and retracting said dies at predetermined points during each revolution thereof, means for feeding mail matter to the printing means, means controlled by the movement of the matter to printing position for locking said dies in extended positions for intervals exceeding normal intervals, means for inking the dies while the same are extended, and means cooperating with the printing means for printing impressions on the mail matter from said dies.

15. A postage meter as characterized in claim 1, including means operatively connected with and adapted to be operated only when the printing means is in operative position for registering successive impressions made by the printing means.

16. A postage meter as characterized in claim 1, including means operatively connected with and adapted to be operated only when the printing means is in operative position for registering successive impressions made by the printing means, and means controlled by the operation of said registering means for locking the printing means against further operation when a predetermined number of impressions has been made by the printing means.

17. A postage meter as characterized in claim 1, including means operatively connected with and adapted to be operated only when the printing means is in operative position for registering successive impressions made by the printing means, and means controlled by the operation of said registering means for locking the printing means against further operation when a predetermined number of impressions has been made by the printing means, said last mentioned means including devices for locking the registering means against further operation when said predetermined number of impressions have been registered thereon.

18. A postage meter as characterized in claim 2, including a housing enclosing said printing means against unauthorized access,

a registering mechanism in said housing, and means operatively connecting the registering mechanism with the printing means for registering successive impressions made by the printing means.

19. A postage meter as characterized in claim 2, including a housing enclosing said printing means against unauthorized access, a registering mechanism in said housing, means operatively connecting the registering mechanism with the printing means for registering successive impressions made by the printing means, and means controlled by the registering mechanism for locking the printing mechanism and the registering mechanism against further operation when the predetermined number of impressions have been made by the printing means.

20. A postage meter as characterized in claim 2, including a housing enclosing said printing means against unauthorized access, a registering mechanism in said housing, means operatively connecting the registering mechanism with the printing means for registering successive impressions made by the printing means, means controlled by the registering mechanism for locking the printing mechanism and the registering mechanism against further operation when the predetermined number of impressions have been made by the printing means, and means for unlocking said printing means and said registering mechanism for further operation when said housing is opened by authorized persons.

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