A. D. JOSLIN.

HAND STAMP.

APPLICATION FILED APR. 3, 1909.

939,513.

Patented Nov. 9, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

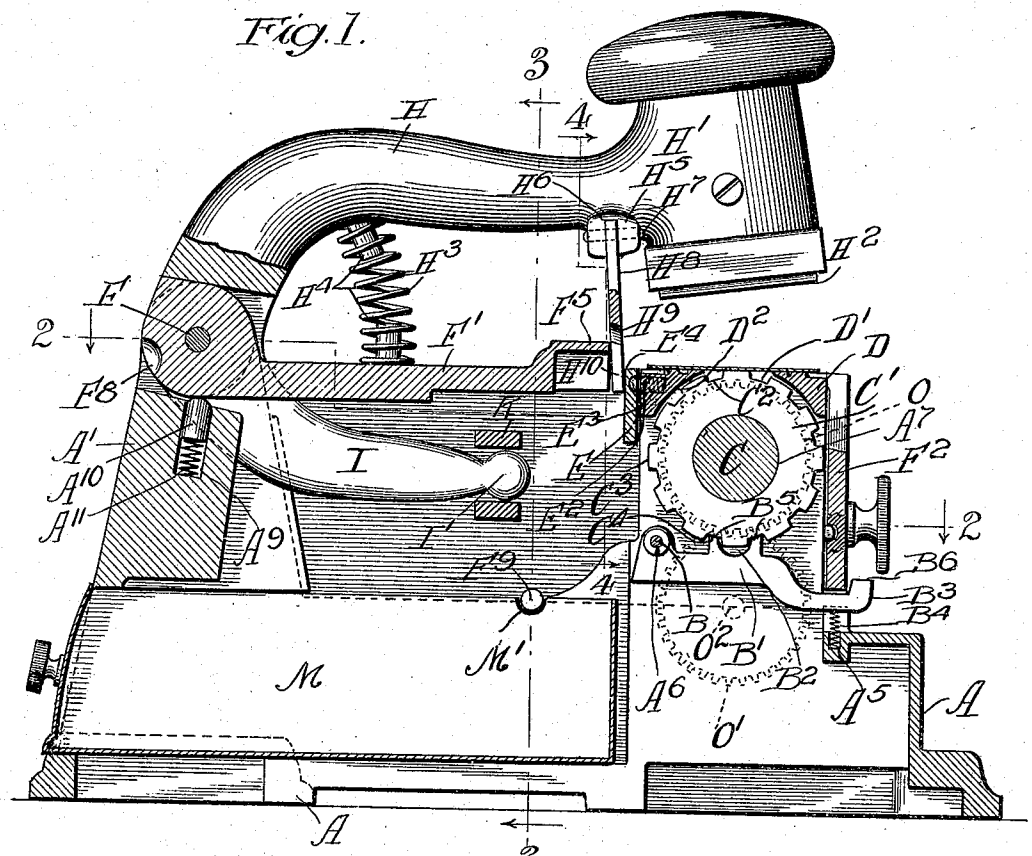
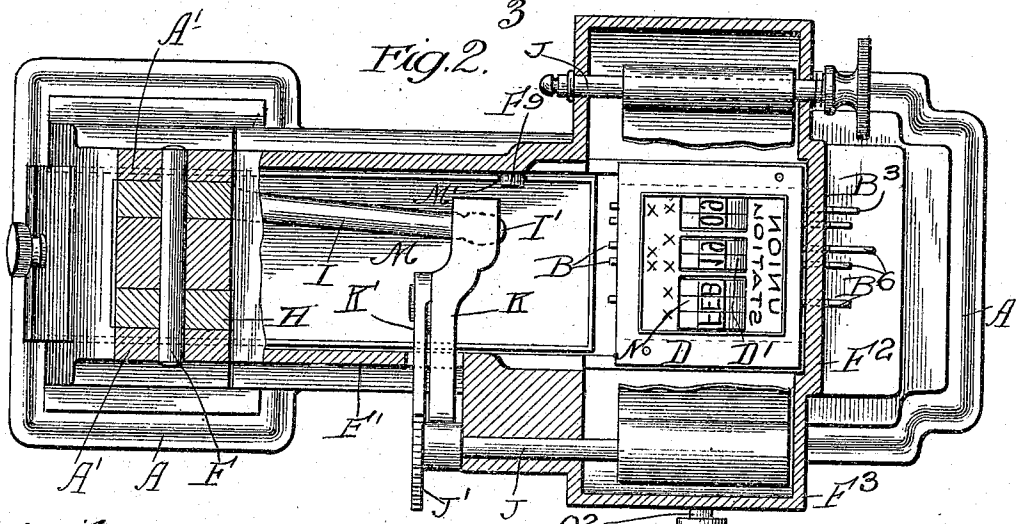


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

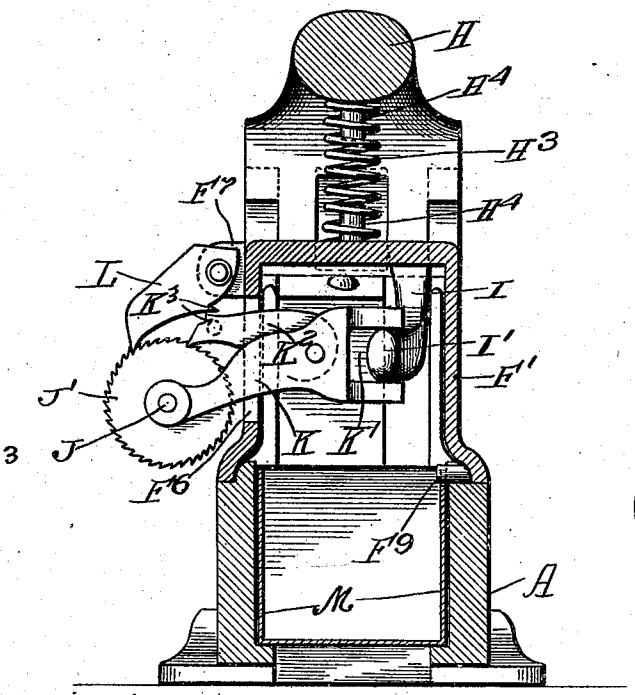


Fig. 6.

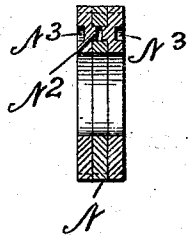


Fig. 7.

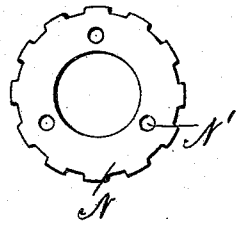


Fig. 4.

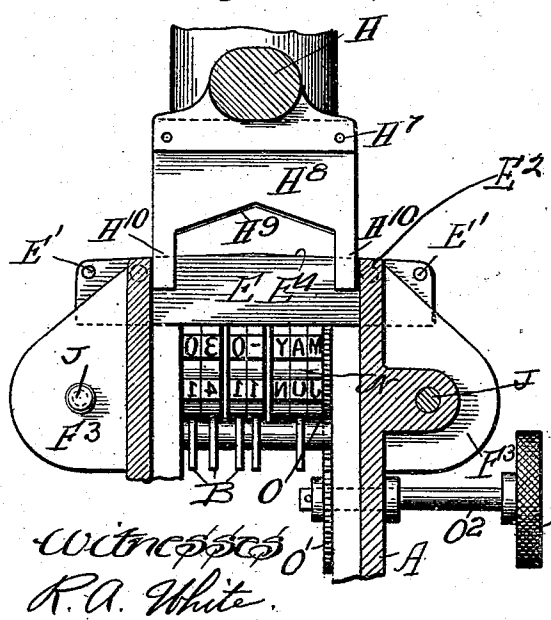
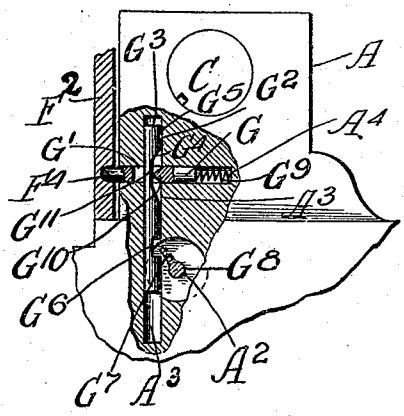


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

ALEXANDER D. JOSLIN, OF CHICAGO, ILLINOIS.

HAND-STAMP.

939,513. Specification of Letters Patent. Patented Nov. 9, 1909.

Application filed April 3, 1909. Serial No. 487,835.

To all whom it may concern:

Be it known that I, ALEXANDER D. JOSLIN, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Hand-Stamps, of which the following is a specification.

My invention relates to that class of stamps used in railway ticket offices for stamping passenger tickets at the time that they are sold.

The object of my invention is to provide an improved cutting device for separating a stub or coupon from the ticket at the time it is stamped; to secure the separate parts cut from the ticket in the base of the stamp under the individual control of the particular person in charge of the stamp as a record of the sales for any stated period; to provide a pivotal separation of an upper and lower part of the main body of the stamp; to provide means whereby said parts may be locked in the closed position thereby securing the safe inclosure of the stubs or coupons within the body of the stamp; to improve the construction and combination of the printing wheels and of the mechanism by which said wheels are locked in position and secure their perfect alinement; to improve the action of the ribbon feeding mechanism. These improvements particularly apply to that class of hand stamps on which I have obtained Letters Patent No. 342,362, and illustrated in my application dated Oct. 28, 1908, Serial No. 459,965.

The means by which I accomplish my object is described in the following specification and illustrated in the accompanying drawings in which:

Figure 1 is a sectional elevation showing the interior parts. Fig. 2 is a horizontal section on the line 2—2 Fig. 1, including parts of the device not shown in Fig. 1. Fig. 3 is a transverse vertical section on the line 3—3 Fig. 1. Fig. 4 is a transverse vertical section on the line 4—4 Fig. 1. Fig. 5 is a sectional view of the housing, base, and locking mechanism, the exterior being broken away and part shown in section. Fig. 6 is a vertical elevation of three printing wheels. Fig. 7 is a side elevation of the center wheel shown in Fig. 6.

In the drawings A indicates the base part of the stamp; A^1 its rear part forming a pivotal support for the upper parts of the stamp. In the right side of the base shown in Fig. 5 is a key hole A^2, a vertical bore A^3, and intersecting this bore is a horizontal bore A^4. In the front part of the base are a series of vertical bores A^5. Extending transversely through the front part of the base A is a rod hole A^6, and a shaft bearing A^7. Supported in the hole A^6 is a rod B. Pivotally supported on this rod are a series of levers B^1. Each of these levers has an open jaw B^2. The free ends of these levers extend horizontally over the front edge of the base A and in vertical position are over the bores A^5 and in engagement with and pressed upward by the coiled springs B^4 supported in the bores A^5.

Revolubly supported in the bearings A^7 is a shaft C. Revolubly supported on this shaft within the walls of the base A are a series of wheels C^1. These wheels are adapted to be revolved together with the rotation of the shaft C, and independently on said shaft. The notches C^2 in the periphery of the wheels form projections C^3 on which there are raised printing characters. These projecting parts when the wheels are on the shaft, are held in alinement by the levers B^1. When these levers are in position under pressure of the springs B^4, the outer corners B^5 of the jaws B^2 are forced into the angles C^4 formed by the base of the notches C^2 and the radial walls of the projections C^3. By these means I accomplish two desirable objects, first, the points B^5 of the jaw of each lever in its vertical movement are free to enter the notches C^2 of the wheel without striking and marring the projections C^3 held between the points of the jaw; second, the points B^5 are adapted to engage the radial walls of the projections C^3 and by a sliding pressure thereon force the wheel to rotate very slightly in either direction till the points of the jaws reach the base of the notch and thereby lock the wheels securely in perfect alinement on the shaft as shown in Figs. 1 and 2. The free ends B^6 of these levers are staggered both as to length and height whereby each lever can be pressed downward independently of the others, and any one, or more of the wheels, be thereby released from their locked positions and re-

volved to any position desired, and the release of the finger pressure on the lever or levers relocks and alines the wheels. Supported on the base A and extending over the wheels C is a printing plate D. This plate has a plurality of apertures D^1 corresponding with the curvature of the channels D^2 on the underside. These channels correspond in number, width, depth, and curvature with the outer periphery of the wheels C and characters thereon; and the parts of the plate between the channels correspond in width and depth with the space between said wheels. By this form of construction I secure a solid printing plate of one piece with a printing surface extending to the closest possible proximity to the characters on the wheels which project through said apertures in the plate. Supported transversely on a housing hereafter described is a knife E shown in Figs. 1 and 4. This knife is movably supported on the dowel pins E^1, and is adjusted thereon by means of a pair of balls E^2 and springs E^3 supported in a bore in said housing. The cutting edge E^4 of this knife is on a level with the face of the printing plate D. Pivotally supported on a shaft F in the rear end A^1 of the base A is a housing F^1 which forms the upper part of the body of the stamp. The front part F^2 of this housing extends over the front part of the base and over the wheels therein, and the front edge is slotted vertically to admit and guide the vertical movements of the levers B^1 pivoted in the base. The cylindrical projection parts F^3 of the housing are adapted to support ribbon spool shafts hereafter described. In the inside of the part F^2 of the housing is a shallow bore F^4 shown in Fig. 5. When the housing is closed on the base this bore registers with the bore A^4 in the base A and is thereby adapted to admit the end of a bolt G which is slidably supported therein. In one side of this bolt is a transverse groove G^1 adapted to allow a tumbler G^2 to be moved vertically therein. This tumbler is slidably supported in the vertical bore A^3 in the base A which intersects the bore A^4. One edge G^3 of this tumbler has an inclined recess G^4, and an indent G^5, and in the lower part of the same edge is a notch G^6. This notch is adapted to admit the wing G^7 of a key G^8. In the bore A^4, is a coiled spring G^9 adapted to press the bolt G outward and into the bore F^4 in the housing. This spring pressed movement of the bolt is limited by the recess in the tumbler G^2, which, when at its highest position as shown in Fig. 5, allows the shoulder G^{10} of the grooved part G^1 of the bolt to engage the center G^{11} of the inclined recess G^4 in the tumbler. In that position the end of the bolt projects into the bore F^4 and locks the housing and base securely together. To unlock these parts the key G^8 is inserted in the key hole A^2 and rotated to the left. In this movement the wing G^7 enters the notch G^6, and forces the tumbler down. In this movement of the tumbler the inclined face of the recess G^4 slides on the point G^{10} of the shoulder of the bolt and forces the bolt back in the base. As the vertical movement of the tumbler continues the point G^{10} enters the indent G^5, and holds the lever in that position till released by a reverse movement of the key which forcing the tumbler upward allows the spring to force the bolt forward and relock the parts.

While the bolt is held in the indent of the tumbler the point of the bolt enters the bore F^4 a sufficient distance to hold the parts together as a spring catch, and to allow the separation of the housing from the base by the application of a little more force to the housing than is required to lift the weight of the stamp. In this pivotal movement of the housing on the base, the sliding movement of the inside of the housing on the point of the bolt presses it back in the base, the compressed spring snapping it back when the housing is opened or closed, without releasing the point of the shoulder of the bolt from the indent in the tumbler. Pivotally supported on the shaft F, is an arm H; this arm has a head H^1. Supported in this head is a platen H^2. This arm is held in a normal position of rest at its maximum height above the printing plate D, by a coiled spring H^3 which is held in position by the teats H^4 on the housing and arm. Immediately back of the head H^1 is a transverse extension H^5 having a channel H^6. Rigidly secured in this channel by the pins H^7 is a knife H^8. The cutting edge H^9 of this knife is an obtuse angle as shown in Fig. 4 at the ends of which are vertical extensions H^{10}. These extensions are slidably engaged with the face of the knife E. The space between these extensions is adapted to the width of the tickets to be cut. The perfect engagement of the cutting edges of the knives E and H^8 during the vertical curvilinear movement of the knife H^8 is secured by spring pressed balls E^2 supported in the housing which presses the knife E against the knife H^8 as shown in Fig. 1. The knife H^8 is slidably supported at the back part F^5 of the housing. Forming an integral part of the arm H, is a lever I. This lever has a spherical end I^1. Pivotally supported on one of the shafts J which are rotatably supported in the cylindrical parts F^3 of the housing, is a lever K. This lever extends at right angles to the shaft through a slot F^6 in the housing. The free end K^1 of this lever is an open jaw. Within this jaw the spherical end I^1 of the lever I moves horizontally as the jaw K^1 of the lever is moved vertically by the curvilinear movement of the lever I. Pivotally

supported on one side of the lever K and extending through the slot F^6 is a pawl K^2. This pawl is adapted to engage and operate the ratchet wheel J^1 fixed on the shaft J. Pivotally supported on a projection F^7 is a second pawl L also adapted to engage the ratchet wheel J^1 and to prevent a reverse movement thereof. This pawl is directly over the pawl K^2. On the underside of this pawl is a shoulder K^3 adapted to be engaged when both pawls are raised, by a like shoulder K^3 on top of the ratchet K^2. When so engaged both pawls are held free from contact with the ratchet wheel which may be rotated in either direction by the operator's fingers. In the rear part A^1 of the base is a vertical bore A^9. Insertible in this bore is a bolt A^{10} and a spring A^{11}. The rounded head of this bolt is adapted to enter a recess F^8 in the rear part of the housing F^1, and to thereby hold said housing in the open position when it is raised from the front part of the base A for the purpose of affording free access to the interior parts of the stamp. A slight downward pressure is sufficient to release it from this bolt which is forced down upon the spring as the housing is pressed down on the base. Insertible in the bottom part of the base, is a drawer adapted to receive the coupons cut from the tickets. This drawer M is locked within the base by a projection F^9 on the inside of the housing. This projection is adapted to enter a recess M^1 in one side of the drawer when the housing is closed on the base, and prevents it from being drawn out from the base, while the housing and base are locked together as described. On the shaft C are three wheels shown in Fig. 6. These wheels are adapted for the printing of the months as shown by the letters FEB, shown in Fig. 2. The center wheel N is shown in Fig. 7. This wheel is pierced by three holes N^1. Each of the outside wheels have projections N^2 adapted to correspond with and to fit into the holes N^1 in the center wheel N. These projections are raised by stamping corresponding recesses N^3 in the opposite sides of the wheels as shown in Fig. 6. This form of construction permits these lettered wheels to be blanked out of sheet metal instead of being milled out of bar metal as heretofore. Fixed on the shaft C between the wall of the base A and the lettered wheels just described is a gear wheel O shown in Fig. 4. In mesh with this gear is a gear O^1 fixed on the shaft O^2 and by which the shaft C is rotated by manipulation of the button O^3. Between the separate dating wheels on the shaft C are friction washers described and shown in my prior patent. These washers revolve with the shaft C and rotate the printing wheels with the shaft when they are released from the levers B^1. Each of the wheels has a smooth bore, and the solid periphery of the bore in each wheel rests perfectly on the shaft C and forms the largest possible base on the shaft to resist the force of the blows of the platen on the top of the wheels, and as there is no scraping or wearing friction of the bore of the wheels as they revolve thereon on the shaft C the bores are not enlarged by use and hence their horizontal alinement with each other and with the printing plate is preserved under the hammering of constant use for an indefinite period.

What I claim as new and seek to secure by Letters Patent is:—

1. In a hand stamp, the combination of a base, and a housing pivoted thereon; with a locking mechanism inclosed in the wall of said base, said mechanism consisting of a bolt movable horizontally into and out of a bore in said housing, and a tumbler movable vertically in slidable engagement with said bolt, said tumbler being adapted to be moved by a certain key insertible in said wall, whereby said bolt can be adjusted to engage said housing as a spring catch releasable by pressure, or to enter said bore as a lock releasable only by means of said key and the movement of said tumbler thereby.

2. In a hand stamp, the combination of a base, an arm and housing pivotally joined thereto, and a locking mechanism within the wall of said base adapted to be operated by a key insertible in said wall, whereby said base and housing can be locked together and released by a key with a spring pressed bolt vertically supported in said base beneath and in contact with the pivotal joint of said housing said bolt being adapted to enter a recess in said joint and to hold said housing when it is unlocked and raised to the open position as described.

3. In a hand stamp the combination of a base adapted to contain a drawer therein, a housing pivotally supported on said base; means in said housing adapted to engage a drawer contained in said base; with a drawer insertible in said base, said drawer being adapted to be engaged by the means in said housing and secured in said base, said drawer being removable from said base only when said housing is in the open position.

4. In a hand stamp the combination of a base, adapted for the insertion of a drawer therein, a housing pivoted on said base adapted when closed on said base to lock a drawer in said base; means in said base for locking said housing in the closed position on said base, and means in said base for holding said housing in an open position; with a drawer insertible in said base when said housing is in an open position and adapted to be locked in said base when said housing is in the closed position.

5. In a hand stamp, a base, a drawer in-

sertible therein, a housing pivoted on said base adapted when closed thereon to lock said drawer in said base, a locking mechanism in said base adapted to lock said base and housing together, and a spring pressed catch in said base adapted to engage and hold said housing in the open position on said base.

6. In a hand stamp the combination of a base and drawer therein, a locking mechanism in the front part of said base, and a spring pressed catch in the rear part thereof, a housing pivoted on said base adapted to lock said drawer in said base, and to be locked in a closed position on said base by said locking mechanism, and to be supported in the open position on said base by said catch; with an arm pivotally supported on said base, adapted to support a platen and operate a ribbon feeding mechanism mounted on said housing.

7. In a hand stamp, the combination with a base having a locking mechanism, a printing mechanism therein, a housing pivotally supported on said base adapted to be locked thereon by said locking mechanism, and an inking ribbon supporting and feeding mechanism on said housing; of a pivotal arm secured on said base a part of said arm being adapted to support a platen and a part adapted to extend within said housing the end thereof being spherical and thereby adapted to slidably engage and operate said ribbon feeding mechanism in said housing.

8. In a hand stamp, the combination of a base, a printing mechanism therein, a housing pivoted on said base, means in said base for locking said housing to said base, a ribbon supporting and feeding mechanism supported on said housing; with a platen arm pivoted on said base said arm having an extension with a spherical end, said end being adapted to engage and operate said ribbon feeding mechanism.

9. In a hand stamp, the combination of a base, a housing pivoted thereon, means for locking said housing on said base, a platen arm pivoted on said base, a portion extending within said housing; with an inking ribbon feeding mechanism supported on said housing, consisting of a pair of rotatable spool shafts, a ratchet wheel fixed on one of said shafts, an open jaw lever pivoted on said shaft adjacent to said wheel, adapted to be slidably engaged by said portion of said arm within said housing and a pawl pivoted on said lever adapted to engage said ratchet wheel and shaft.

10. In a hand stamp, the combination of a base, a housing pivoted thereon, means for locking said housing on said base, a platen arm pivoted on said base, a part thereof extending into said housing having a spherical end; with an inking ribbon feeding mechanism supported on said housing having an actuating lever with an open jaw in which the spherical end of said arm is slidably engaged.

11. In a hand stamp, the combination of a base, a housing pivoted thereon, an inking ribbon holding and feeding mechanism supported on said housing, a platen arm pivoted on said base, a part thereof extending within said housing adapted to be slidably engaged with and to operate said mechanism; with a printing mechanism consisting of a shaft rotatably supported on said base, a series of wheels revolubly supported on said shaft, means on said shaft, and in said base adapted to rotate said shaft and wheels, and a pivotal locking mechanism in said base adapted to lock said wheels on said shaft.

12. In a hand stamp, the combination with a base, a housing thereon and printing wheels having peripherical indents; with corresponding spring pressed levers pivoted horizontally in said base, beneath said wheels, the free ends thereof extending through vertical guide slots in the front wall of said housing, each of said levers having an open jaw adapted to engage the radial walls of two of said indents at the same time, whereby each of said wheels are individually alined, locked, and released, by the vertical movement of each corresponding lever as described.

13. In a hand stamp, a base, a housing thereon, printing wheels in the base, having regularly spaced peripheral indents, spring pressed levers pivoted in said base beneath said wheels, the free ends extending at right angles to the axes of said wheels through the front of said housing, an open jaw forming part of each of said levers, adapted to engage two of said indents in its corresponding wheel at the same time, vertical slots in the front of said housing adapted to guide and limit the movement of said levers.

14. In a hand stamp, the combination of a base, a housing pivoted thereon, a ribbon feeding mechanism on said housing, a platen arm pivoted to said base adapted to actuate said mechanism, a series of printing wheels rotatably supported in said base, having angular peripherical recesses, and means for rotating said wheels; with a locking mechanism adapted to engage and lock said wheels consisting of a plurality of independent levers pivotally supported in the front of said base, each of said levers having an open jaw the opposite points thereof being adapted to engage the radial walls of two of said recesses in each of said wheels, and means for holding said levers normally in contact with said wheels.

15. In a hand stamp, the combination with a base, a housing and a platen arm pivoted on the base, said arm having a transverse channel adapted to support a knife; of a knife rigidly secured in said channel, and a

knife slidably supported on said housing adapted to be held in slidable contact with said knife in said channel, said second knife having a plurality of indents in the side adjacent to the housing, and a pair of spring pressed balls held in said housing and said indents adapted to normally hold the cutting edge of said knife in contact with said first mentioned knife and oscillate with the curve described by the movement of the arm.

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Witnesses:
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