J. STASIAK.

MAIL BOX AND TIME MARKER.

APPLICATION FILED JAN. 27, 1909.

1,109,646.

Patented Sept. 1, 1914.

4 SHEETS—SHEET 1.

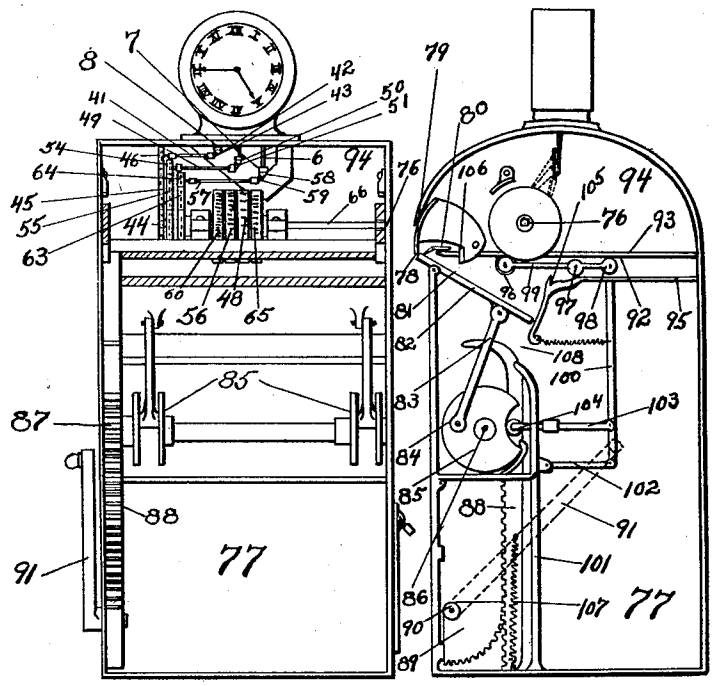


Fig. 1

Fig. 2

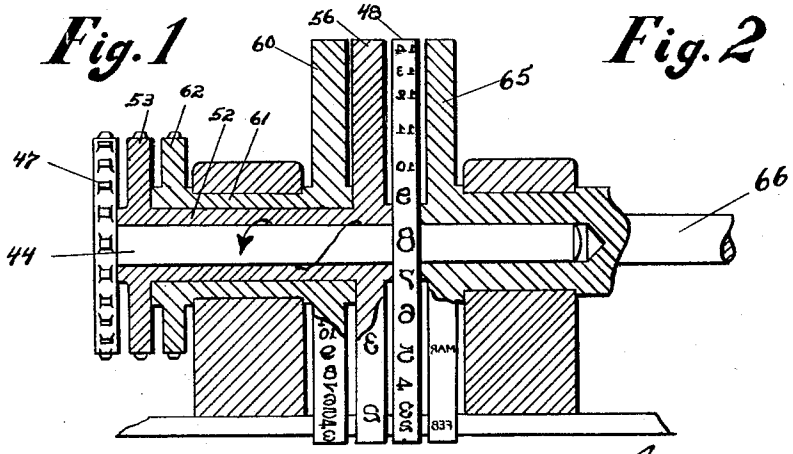


Fig. 3

Witnesses
Sim Albin
Leo G. Brooks.

Inventor.
John Stasiak
By
His Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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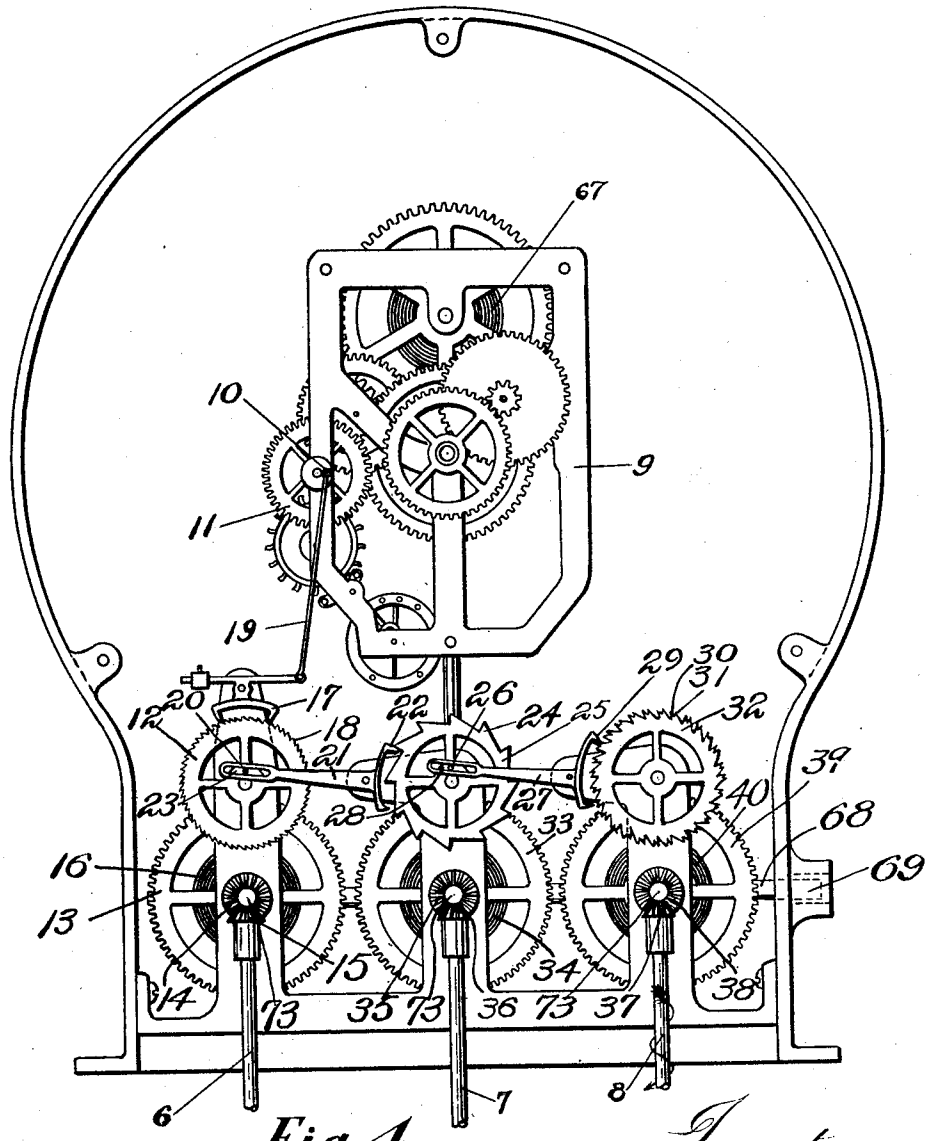


Fig. 4.

Witnesses
Sim. Albin
L. W. Brooks.

Inventor
John Stasiak
By Paul Wallot
His Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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4 SHEETS—SHEET 3.

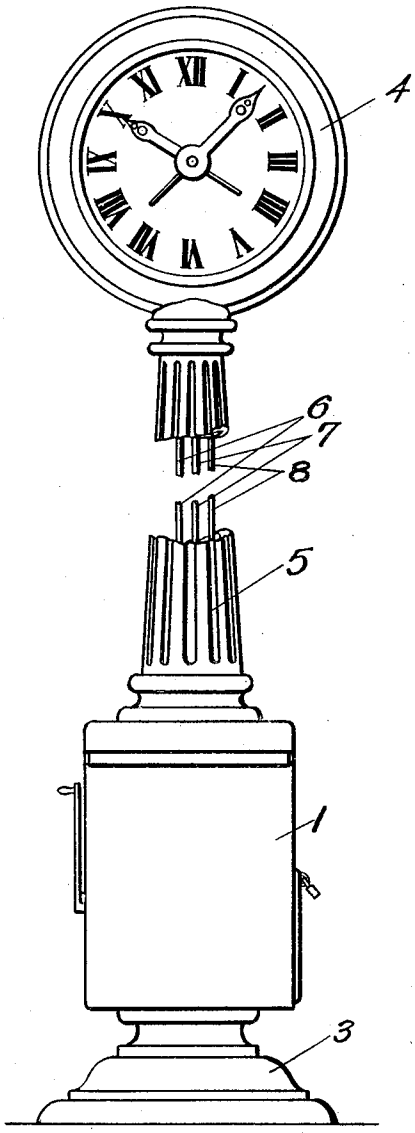


Fig. 5.

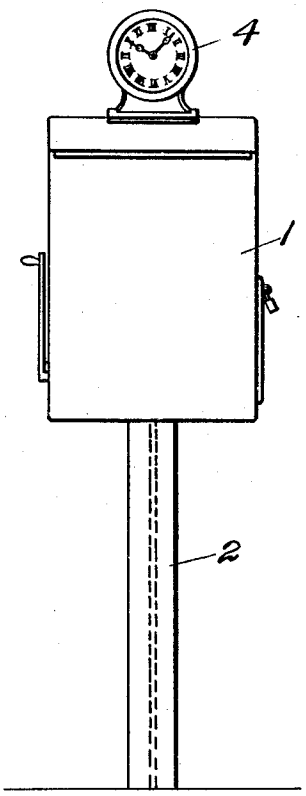


Fig. 6.

Witnesses:
S. Albin.
L. L. Brooks.

Inventor
John Stasiak.
By Paul Wallot
His Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

J. STASIAK.

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4 SHEETS—SHEET 4.

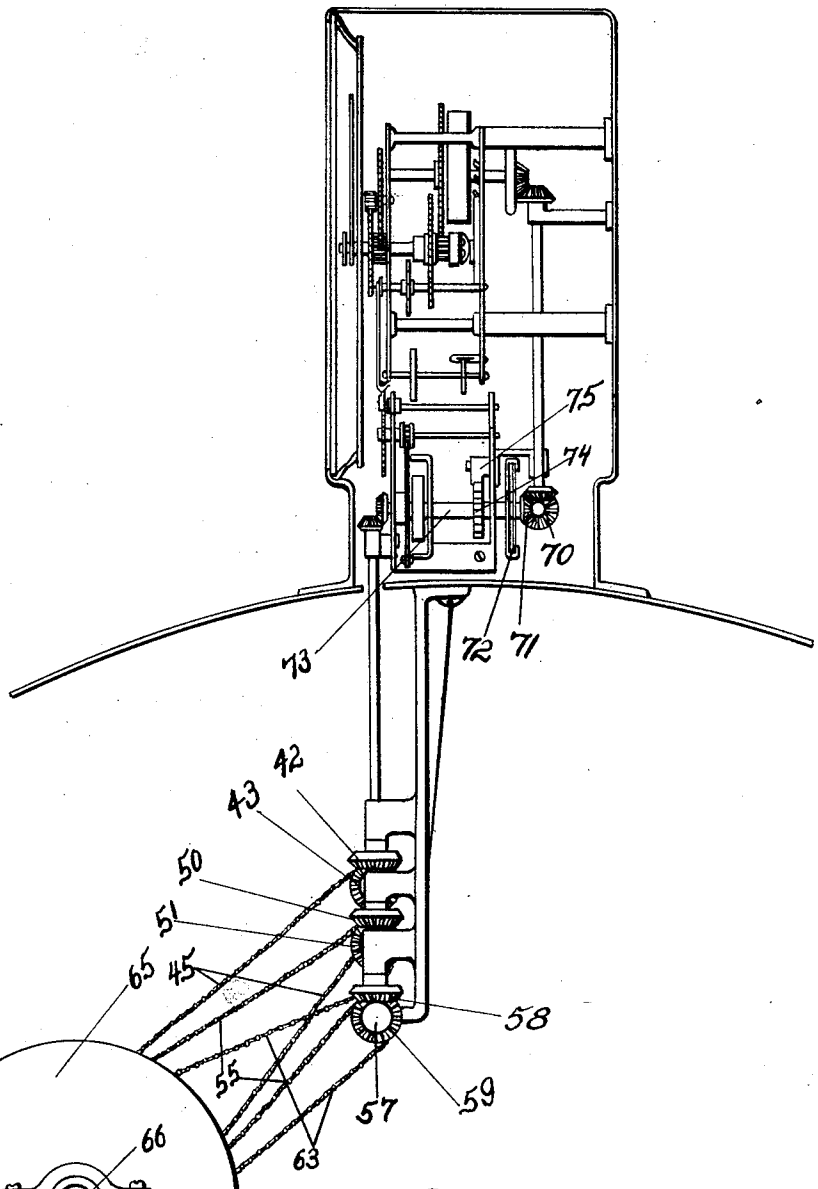


Fig. 7.

Witnesses
S. Albin
L. J. Brooks.

Inventor—
John Stasiak
By
His Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN STASIAK, OF CUMBERLAND, WASHINGTON.

MAIL-BOX AND TIME-MARKER.

1,109,646. Specification of Letters Patent. Patented Sept. 1, 1914.

Application filed January 27, 1909. Serial No. 476,854.

To all whom it may concern:

Be it known that I, JOHN STASIAK, a citizen of the United States, residing in the city of Cumberland, in the county of King and State of Washington, have invented a new and useful Mail-Box and Time-Marker, of which the following is a clear and concise specification.

My invention relates to a mail box and time marker in which it is impossible to insert the letter into the box without being printed.

I am aware that there are mail boxes having time printing devices forming a part thereof but such devices are very complicated and do not prevent the insertion of letters without being printed.

The objects of my invention are to provide a time printing letter box having few parts and automatic in its printing mechanism. To provide a self printing time stamping mechanism for mail boxes; to provide a mail box having the letter opening governed by the printing mechanism operating device. I accomplish these as well as minor objects by the construction now preferred by me and illustrated in the accompanying drawing in which—

Figure 1 is an elevation showing the printing mechanism of my device; Fig. 2 is an elevation at 90 degrees from Fig. 1; Fig. 3 is a detailed view of the type wheels of my device; Fig. 4 is a detail view showing the connection of the type operating mechanism with the clock works; Figs. 5 and 6 show the application as well as the external appearances of my device and Fig. 7 is a fragmentary section showing the clock works and connections to the type wheels.

Similar reference numerals refer to similar parts throughout the several views of my device as illustrated in the accompanying drawings.

The mail box 1 is secured to the post 2 in the usual manner or may be mounted on the pedestal 3 and the clock 4 may be connected to said box 1 by the column 5 which is preferably hollow and adapted to receive the vertical shafts 6, 7 and 8. It may be desired to provide a smaller clock and in Figs. 1, 2, 4, 6, and 7 I have shown the clock 4 mounted on the top of said box 1 and without a column. The works 9 of said clock are provided with a crank 10 secured to the wheel 11. The shaft of the escapement wheel 12 is geared to the gear-wheel 13 the shaft of which in turn is connected to the vertical shaft 6 by the bevel gears 14 and 15. Said gear wheel 13 is driven by a spring 16 which acts against the escapement 17 engaging the teeth 18 which are provided on said escapement wheel 12. The teeth 18 being sixty in number advance a single tooth for each revolution of the wheel 11, the crank 10 operating said escapement 17 by the connecting link 19. The escapement wheel 12 is provided with a crank 20 which operates the lever 21 secured to the escapement 22, the crank 20 traveling in the slot 23 provided in the end of said lever 21. The escapement 22 engages the teeth 24 of the escapement wheel 25, the said teeth 24 being twelve in number thus each revolution of the wheel 12 will advance the wheel 25, one twelfth of a revolution. Said wheel 25 is provided with a crank 26 which actuates the lever 27 by means of the slot 28 provided in the end thereof. Said lever 27 operates the escapement 29 which engages the teeth 30 and 31 on the wheel 32. Said teeth 30 and 31 are disposed relatively a greater distance from each other at every other tooth, thus the teeth are arranged at a short distance then a long distance then a short distance and so on making up the full number of thirty-one of each of said teeth 30 and 31. Thus due to the varying distance between said teeth 30 and 31 the parts operated by said wheel 32 are substantially advanced every other revolution of the wheel 25. The wheel 25 controls the gear wheel 33 which is driven by the spring 34 and the shaft of which operates the shaft 7 by means of the bevel gears 35 and 36. The vertical shaft 8 is driven by the bevel gears 37 and 38 which are controlled by the gear wheel 39 and driven by the spring 40. Said gear wheel 39 is controlled by the escapement wheel 32. The vertical shaft 8 drives the shaft 41 by the bevel gears 42 and 43. Said shaft 41 drives the shaft 44 by means of the chain 45, the sprocket wheel 46 which is secured to the said shaft 41 and the sprocket wheel 47 which is secured to the said shaft 44. The shaft 44 is secured to the day of the month wheel 48 which has thirty-one numbers in type on the periphery thereof corresponding with the thirty-one numbers of the days of the months. The vertical shaft 7 drives the shaft 49 by means of the bevel gears 50 and 51. The shaft 49 drives the sleeve 52 by means of the sprocket wheel 53 secured

to said sleeve and the sprocket wheel 54 secured to the shaft 49, said sprocket wheels 54 and 53 being connected by the chain 55. The sleeve 52 operates the hour wheel 56 which carries on its periphery the type for printing the twelve hours of the day. The vertical shaft 6 drives the shaft 57 by means of the bevel gears 58 and 59. The shaft 57 drives the minute wheel 60 which is secured to the sleeve 61 secured to the sprocket wheel 62. Said sprocket wheel is driven by the chain 63 operated by the sprocket wheel 64 which is secured to said shaft 57. The wheel 60 being provided with the type numbering from one to sixty and conforming to the minutes indicated by the clock dial.

I have provided a month wheel 65 having on its periphery type for the abbreviations of the twelve months of the year, said month wheel being secured to the shaft 66 which is operated by the mail man each month. The springs 16 34 and 40 as well as the spring 67 of the clock are wound simultaneously by means of the shaft 68 which is provided with a squared end 69 accessible from the exterior of said clock. The shaft 68 is provided with bevel gears 70 which drive the bevel gears 71. The bevel gears 71 are connected to the friction disk 72 which operates the spring shaft 73. The spring shaft 73 is rigidly connected to the spring 16. The springs 34, 40 and 67 are also wound by similar mechanism to that employed in winding said spring 16. It is obvious that these several springs will not be completely wound simultaneously and that by turning the shaft 68 until the last of the springs is wound those which have previously been wound will not be overwound as the friction devices will slip. The shafts 73 are provided with a ratchet 74 engaging the pawl 75 in the customary manner employed in operating the springs of ordinary clocks. The shaft 66 is provided with a squared end 76 accessible from the exterior of my device.

The mail box 1 is provided with a mail receiving space 77 which receives the envelops after being stamped. The receiving slot 78 is normally held closed by the pivotally mounted lid 79. Said slot 78 is also provided with a spring 80 adapted to prevent more than one letter being inserted at a time. Said spring is disposed the thickness of the edge of an ordinary envelop from the surface 81 of the swinging platform 82. Thus after the envelop is inserted it will rest upon said swinging platform until printed. The platform and envelop are raised by the connecting link 83 which is connected to the crank 84 secured to the cams 85. Said cams are secured to the shaft 86 driven by the pinion 87 which meshes with the rack 88. The rack 88 intermeshes with the segmental rack 89 which is secured to the shaft 90 operated by the lever 91. The face of the wheels 60, 56, 48 and 65 project below the under surface 92 of the partition 93 which separates the mail receiving space 77 from the type wheel space 94. The ink plate 95 is disposed between said partition 93 and said space 77 and is adapted to guide as well as ink the ink roller 96 as well as the idler rollers 97 and 98 which are connected to said ink roller by the rod 99. Said rollers 96, 97, 98 and rod 99 are connected to the arm 100 at its upper end. Said arm is connected to the partition 101 by the link 102. The arm 100 is operated by the push rod 103 which is provided with a roller 104 resting against the surface of the cams 85. To prevent the ink from coming in contact with the edges of the envelop I have provided a drain 105.

The operation of my device is accomplished by the movement of the lever 91 toward the operator in front of the machine. The lever 91 is rigidly secured to the segmental rack 89 which will, by the movement thus described, raise the rack 88 overcoming the spring 107. The rack 88 meshes with the pinion 87 thereby revolving the pinion 87 and the crank 84 secured thereto. It will thus be seen by referring to Figs. 1 and 2 of the accompanying drawings that when the lever 91 shown in dotted lines in Fig. 2 is moved slightly beyond the vertical position that by reason of the crank 84 being connected to said lever 91 as described above, said crank 84 will revolve carrying the platform 82 connected by the link 83 thereto first in a downward direction to the lowermost position of travel of said platform which upon revolving said cranks 84 further will raise said platform 82 until the uppermost position has been reached. The lid 79 which is pivotally secured to the mail box 1 will be raised because the projection 106 is brought in contact with the surface 81. The operator then places the letter in the opening provided for it and opened by the movement of the lid 79. The lever 91 is moved farther toward the operator which further revolves the cranks 84 lowering the platform 82 and permitting the letter to slide down the incline caused by the position of said platform 82, said letter passing under the projection 106 and traveling downwardly until striking the partition adjacent the edge of said platform 82. It will thus be seen that the cranks 84 have made a complete revolution and that the platform 82 has been lowered and raised to the uppermost position of travel and in turn has operated the lid 79 permitting the letter to be inserted in the opening and that said platform 82 has traveled a short distance downwardly closing said lid 79 and disengaging the projection 106 permitting the letter to travel by gravity until restricted by a partition. The lever 91 and all of the parts operated there-

by are reversed in their movement by the spring 107 which reverses the direction of rotation of the cranks 84 which again raises the platform 82 until the letter thereon comes in contact with the printing wheels of my device which occurs when the platform 82 is again at the upper position of travel. It will be seen that by further revolving that said platform 82 is lowered to the lowermost position of travel which permits the letter to gravitate from the position which it has occupied having thus far been restricted by the partition until the edge of said platform 82 has traveled lower than the lower edge of said partition permitting the letter to gravitate through the opening 108 into the receiving portion of my device. Each operation of the lever 91 operates the roller 104 which is connected to the roller 96 as heretofore described freshly inking the type wheels of my device so that one letter or envelop is printed each time the lever 91 is operated and returned by the spring as herein described.

I do not wish to be limited to the specific construction but wish to depart from such details as are within the scope of my patent.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States is:

1. In a mail box and time marker, a lever, a rack operated thereby, a movable platform operated by said rack, a lid normally closing the letter opening of the mail box and operated by said movable platform, a printing mechanism operated by said lever, means provided in said opening for permitting a single letter only to enter said mail box and means for retracting said lever to print the envelop of the letter.

2. The combination with a mail box and mail marker having an inlet opening, of means in said opening for preventing the insertion of more than a single letter at any one time, an oscillating platform pivoted in said opening, a pivoted lid for said opening having means adapted to engage said platform during a portion of its travel, printing means arranged above said platform, and means for oscillating said platform, said oscillating means so arranged that during the period of its operation in an initial direction said platform is caused successively to engage said lid to uncover said inlet opening to permit the insertion of a letter, and then to convey said letter to a position beneath said printing means, and during the period of its operation in the reverse direction, said platform is caused to press said letter against said printing means and then deposit said letter in the receiving space of said mail box.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN STASIAK.

Witnesses:
H. E. TALBOT,
R. S. HURD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."