

E. N. SHEWELL.

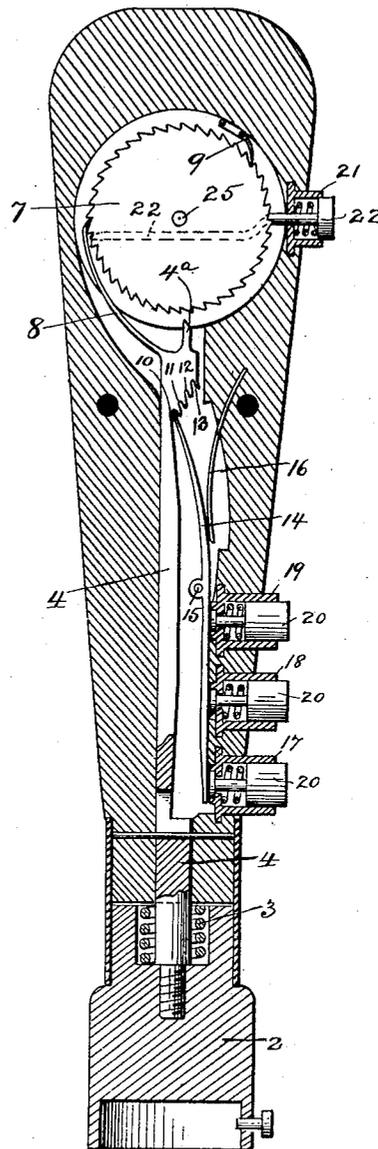
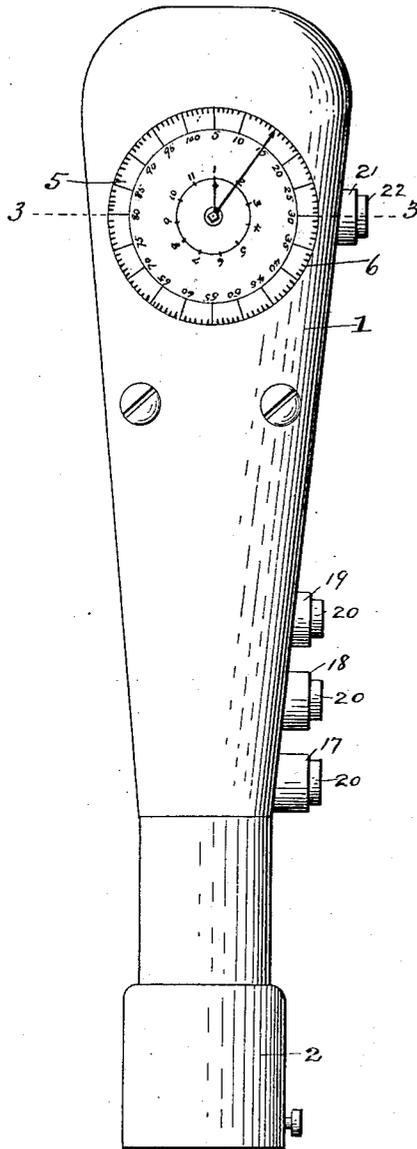
HAND STAMP CANCELER AND REGISTER.

No. 559,148.

Patented Apr. 28, 1896.

Fig. 1.

Fig. 2.



Witnesses:

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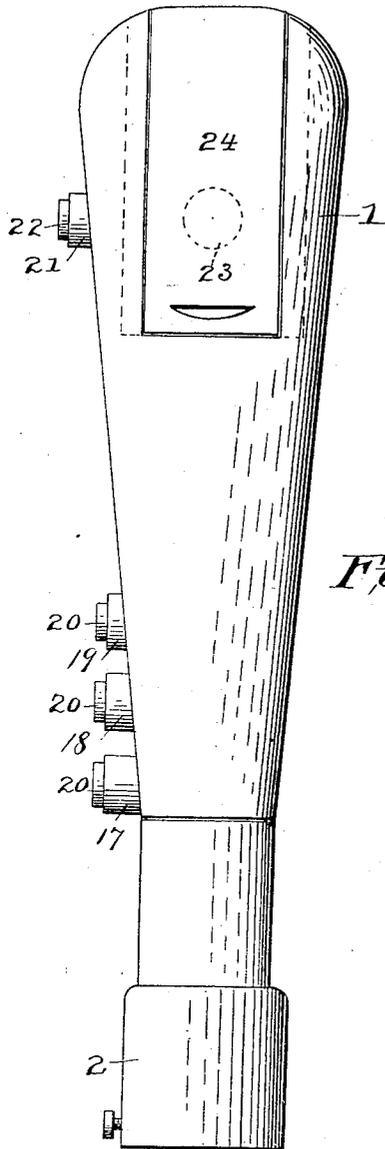


Fig. 4.

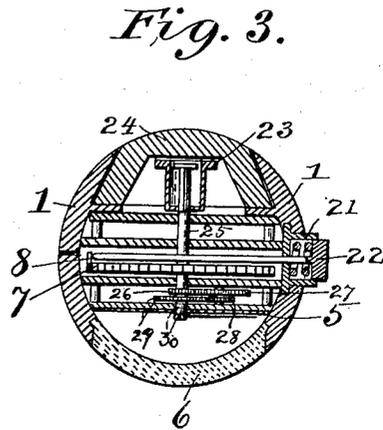


Fig. 3.

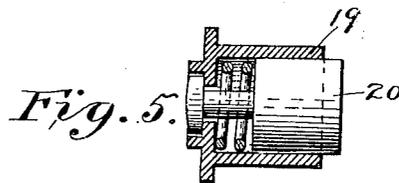


Fig. 5.

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UNITED STATES PATENT OFFICE.

EMORY N. SHEWELL, OF SHREWSBURY, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO HARRY SCHROEDER, OF RAILROAD, PENNSYLVANIA.

HAND STAMP CANCELER AND REGISTER.

SPECIFICATION forming part of Letters Patent No. 559,148, dated April 28, 1896.

Application filed July 16, 1895. Serial No. 556,173. (No model.)

To all whom it may concern:

Be it known that I, EMORY N. SHEWELL, a citizen of the United States, residing at Shrewsbury, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in a Combined Hand Stamp Canceler and Register, of which the following is a specification.

My invention relates to devices for canceling postage-stamps by hand, and has for its object to provide an improved construction whereby the value of the stamps canceled will be automatically registered, thereby saving the time and labor now employed, particularly in small post-offices, in securing a register of the same.

A further object of my invention is to provide a simple means for shifting the registering mechanism, whereby stamps of different values may be canceled with the same implement and an accurate register kept of the total value of the stamps canceled. These objects I accomplish in the manner and by the means hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of my improved device. Fig. 2 is a central vertical section. Fig. 3 is a horizontal section on the line 3 3 of Fig. 1. Fig. 4 is a rear elevation, and Fig. 5 is an enlarged detail sectional view, of one of the plunger-sockets.

Similar figures of reference denote corresponding parts in the several views.

In the said drawings, the numeral 1 denotes the handle of my improved stamp-canceler, and 2 a block in the lower end thereof carrying the rubber or other stamp for giving the impression to the letter. This stamp may be made so as to be changed to suit the date on which it is used in any well-known manner. The block 2 is longitudinally movable in the handle and is normally retained in its lowermost or projected position by the spring 3, as shown. Permanently fixed to said block and passing centrally up into the handle is a rod 4, for a purpose hereinafter to be described.

Located in the upper end of the handle is a dial 5, having the outer edge of its face marked into, say, one hundred subdivisions, in a manner similar to that in which minutes are marked on the dial of a watch. An inner

circle is subdivided into, say, ten divisions, as the hours are indicated on the dial of a watch. A long and a short hand, concentrically mounted, serve as indicators and are controlled in their rotation by mechanism hereinafter described. In the surface of the handle over this dial is located a glass plate 6 to permit said dial to be seen at all times.

Attached to the shaft 25, on which the long hand is mounted, is a toothed wheel 7, having one-hundred teeth in its periphery to correspond with the number of graduations on the dial 5. A smaller toothed wheel 26, also mounted on the shaft 25, is in mesh with a larger toothed wheel 27, mounted on a suitable shaft carried by the frame. This shaft also carries a smaller toothed wheel 28, which in turn meshes with larger toothed wheel 29, mounted on the sleeve 30 on shaft 25, carrying the short hand. The relative sizes of these wheels 26, 27, 28, and 29 is such that one complete rotation of wheel 7 will impart a movement to said short hand equal to the distance between two of the ten graduations which it indicates.

The necessary step-by-step movement is imparted to the wheel 7 from the block 2, through the rod 4, by the following mechanism: Rigidly attached to the upper end of said rod is the curved arm 8, curving around to one side of the wheel 7 and normally engaging with a tooth thereon, as shown. It will thus be seen that any upward movement of the rod 4 will, through the curved arm 8, impart this movement to the wheel 7, thereby moving the long hand past one or more of the graduations on the dial, the movement of the rod 4 being controlled by mechanism hereinafter described. A spring-arm 9 permits the rotation of the wheel 7 only in the direction imparted by the upward movement of the rod 4, the end of the arm 8 slipping past the teeth during the downward movement of the rod. On the upper end of the rod 4 is a projection or tooth 4^a, which engages between two of the teeth in the wheel 7 when said rod reaches its uppermost position, thereby preventing any liability of the wheel 7 being rotated more than the predetermined distance.

The mechanism for controlling the length of stroke of the rod 4 is as follows: The said rod is provided near its upper end with a

series of notches, preferably four in number, and indicated by the figures 10, 11, 12, and 13. An arm 14, pivoted at 15, engages with one of these notches, and has a spring-plate 16 for normally pressing arm 14 into engagement with said notches. Located in the handle and below the pivot 15 are a series of sockets 17, 18, and 19, preferably three in number. These sockets project through to the outside of the handle and are each provided with a spring-retracted plunger 20, as shown more particularly in Fig. 5. When the arm 14 is engaged with the lowermost notch 10 in the rod 4, the upward movement of said rod, imparted thereto by striking the stamp either on the inking-pad or on a letter, is limited, so as to impart a rotary movement of only one tooth to the wheel 7. When the notch 11 is engaged, the wheel will be moved two teeth. When the notch 12 is engaged, the wheel will be moved four teeth, and when the notch 13 is engaged the wheel will be moved nine teeth. It will be understood that the spring 3 tends to press the block 2 and rod 4 as far down as the position of the arm 14, engaging with the notches, will permit.

In order to control the position of the arm 14, the lower end thereof is extended down so as to be opposite to the sockets 17, 18, and 19. Now when the plunger 20 in the lowermost socket 17 is pressed inward, the arm 14 is rocked on its pivot and the rod 4 will move downward until the upper end of said arm engages with the notch 11, so when the plunger 20 in socket 18 is pressed the arm will engage with notch 12, and when the plunger 20 in socket 19 is pressed the arm will engage with notch 13. It will be understood that the lengths of the plungers in these sockets are regulated so as to produce this result.

In order to prevent the rotation of the wheel 7 during the upward movement of the rod 4, when desired, I provide a socket 21 in the side of the handle opposite to the center of the dial, having a spring-retracted plunger 22, similar in construction to that of the plunger in the sockets 17, 18, and 19, but long enough to pass completely across the dial mechanism under the wheel 7 and engage with the curved arm 8. By pressing this plunger inward the arm 8 is forced outward from engagement with the wheel 7 and the rod 4 may be moved up and down without imparting motion to the wheel 7. The shaft carrying the long hand projects through to the rear of the dial mechanism and is squared on its rear end to receive a sliding button 23, adapted to be moved longitudinally thereon, the shaft being headed to prevent its complete disengagement therefrom. The handle 1 is provided with a sliding cover 24, which when closed conceals this button and presents a smooth outer surface to the hand of the operator, but which may be slipped upward in grooves in the handle to permit access to the sliding button. The latter can then be drawn to its outermost position on the shaft and said shaft rotated, thus inde-

pendently rotating the long hand and setting the same in any desired position.

From the above description the operation of my device will be understood to be as follows: When the parts are in their normal positions, the arm 14 will be in engagement with the lowermost notch 10. Now when a two-cent stamp is to be canceled the stamp is struck upon the inking-pad, thus forcing up the block 2 and rod 4 and rotating the wheel 7 one tooth. Then when the impression is made on the letter the wheel is in the same way rotated another tooth, thus registering two cents. When a one-cent stamp is to be canceled, the plunger in socket 21 is pressed as the inking-pad is struck, thus throwing the arm 8 out of engagement with the wheel 7 and registering nothing. Now by releasing the plunger when the letter is struck the device registers one. When a three-cent stamp is to be canceled, the plunger in lower socket 17 is pressed as the inking-pad is struck, thus registering one, but rocking the arm 14 so as to engage with notch 11 as the rod 4 descends. Now when the stamp is struck the wheel will be moved two teeth, thus registering three in all. So when a five-cent stamp is to be canceled the plunger in socket 18 is pressed, when the inking-pad is struck and the arm 14 will engage with notch 12 as it descends and will register four more when the letter is struck. To register a ten-cent stamp the plunger in socket 19 must be pressed, as above described, and the result will be ten. It will be understood that the above-described arrangement of plungers for registering three, five, and ten cent stamps is arbitrary, and the same may be varied to register stamps of any denominations.

I do not desire to limit myself to the particular arrangement of mechanism for displaying the totals, as any desired mechanism for performing the same function may be employed.

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

1. In a hand stamp canceler and register, the combination of a handle, a spring-pressed block vertically movable in said handle and carrying the canceler, a toothed wheel in said handle controlling an indicator, a rod carried by said block and adapted to impart a step-by-step movement to said toothed wheel, said rod being provided with notches and a spring-pressed arm adapted to engage with said notches in said rod to limit its downward movement and so control its upward operating-stroke, substantially as shown and described.

2. The combination with a handle, a spring-pressed canceling-block therein, a toothed wheel in the handle controlling an indicator, and a rod carried by said block and operating said toothed wheel and having a series of notches therein, of a spring-pressed arm engaging with the notches in said rod, and a

series of plungers in the handle acting on said spring-pressed arm to control its engagement with the notches in said rod, substantially as shown and described.

5 3. The combination with a handle, a spring-pressed canceling-block therein, a toothed wheel in the handle controlling an indicator, and a rod carried by said block and operating said toothed wheel and having a series of
10 notches therein, of a spring-pressed arm engaging with the notches in said rod, a series of sockets in the handle, and a series of spring-retracted plungers in said sockets adapted to be pressed into engagement with the spring-pressed arm to control its engagement with
15 the notches in said rod, substantially as shown and described.

4. The combination with a handle, a spring-pressed canceling-block therein, a toothed
20 wheel in the handle controlling an indicator, a rod carried by said block, a series of plungers on the side of said handle and a curved arm on said rod normally engaging with the teeth on said wheel, of a plunger engaging
25 with said curved arm to throw it out of engagement with the toothed wheel, substantially as shown and described.

5. In a hand stamp canceler and register, the combination with a handle, a spring-pressed block vertically movable in said handle and carrying the canceler, of a toothed
30 wheel in said handle controlling an indicator, a rod carried by said block, said rod having its upper end made wedge-shaped, and provided near its upper end with a curved arm
35 held normally in contact with the periphery

of the toothed wheel by a spring-pressed arm and adapted to impart a step-by-step movement to said toothed wheel, the wedge-shaped end of the rod being adapted to engage between the teeth of the wheel when it has been
40 rotated to its uppermost position by the curved arm, substantially as shown and described.

6. In a hand stamp canceler and register, 45 the combination with a dial for indicating the value of stamps canceled, of the block 2 vertically movable in the handle and carrying the canceler and the rod 4, the spring-pressed arm 14, the series of plungers 20 and 22 controlling said arm and rod, the toothed wheel
50 7 operated by said rod and controlling the indicator, the shaft 25 having its rear end squared and headed and carrying the movable button 23 for independently rotating said shaft, and the sliding cover 24, substantially
55 as shown and described.

7. The combination in a hand stamp canceler and register, of the handle and register therein consisting of the dial 5 and the indicators or hands, the wheels 26, 27, 28, and 29,
60 with the toothed wheel 7 carried upon the shaft 25, the rod 4, the spring-pressed block 2, said rod 4 being controlled by the series of plungers 20 operating upon the spring-pressed
65 arm 14, and the plunger 22 operating upon the arm 8 upon the upper end of said rod, substantially as shown and described.

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Witnesses:

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