S. E. GREENE.

PUNCH.

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1,171,608. Patented Feb. 15, 1916.

Fig. 1.

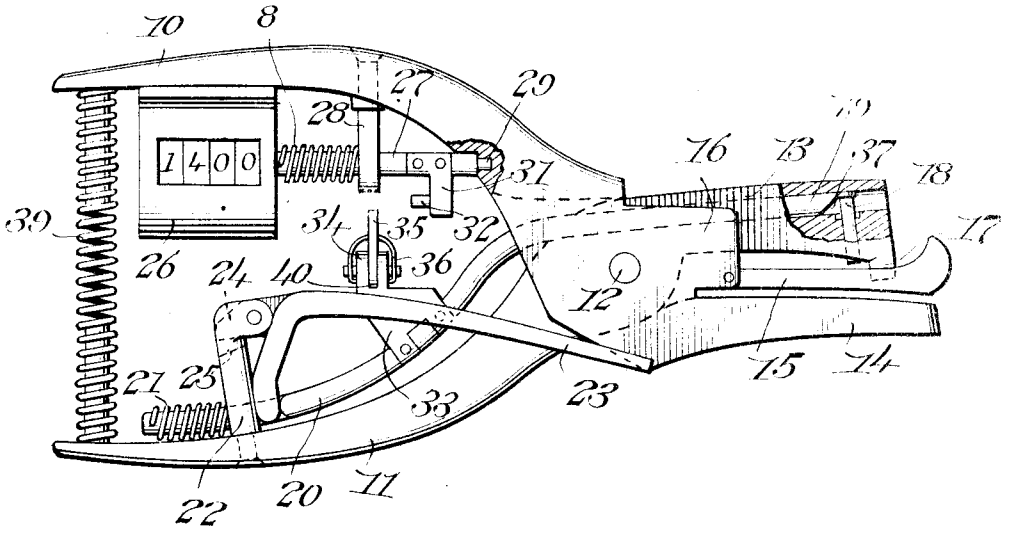
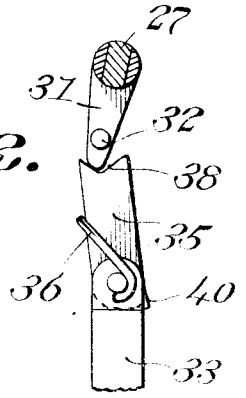


Fig. 2.



Witnesses

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PUNCH.

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To all whom it may concern:

Be it known that I, SELAH E. GREENE, a citizen of the United States, residing at Ogden, in the county of Weber and State of Utah, have invented certain new and useful Improvements in Punches, of which the following is a specification.

This invention relates to a punch which is to be used by conductors, when canceling tickets and the principal object of the invention is to provide a punch which is so constructed that a register carried by the punch will be operated when the ticket is punched and to also construct the punch so that the ticket will be marked, thus indicating that the registering portion of the punch was operated when the ticket was punched.

Another object of the invention is to provide improved means for permitting the registering portion of the punch to be operated at will thus permitting tickets to be punched without the register being operated if so desired.

Another object of the invention is to so mount the registering apparatus that it will be out of the way but to so mount the actuating lever of the registering device that it will be positioned in a convenient place to be operated by the thumb of the conductor using the punch.

This invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a view showing the punch in elevation with portions of the punch being broken away; and Fig. 2 is an enlarged fragmentary view of the register operating mechanism.

The body portion of the punch is constructed somewhat similar to punches which are now in use and includes the handles 10 and 11 which are pivotally connected by means of the pin 12 and terminating in the jaws 13 and 14, the jaws 14 carrying a plate 15 which is pivotally connected with the shoulder 16. The jaw 13 is provided with a lug 17 which passes through plate 15 and through jaw 14 to punch the ticket in the manner in which tickets are usually perforated by punches.

In order to indicate that the ticket has been registered by the register carried by the punch there has been provided a pin 18 which is slidably mounted in an opening formed in jaw 13 and is advanced into a punching position by the plunger 19 passed through a second set of openings formed in plate 15 and jaw 14, thus forming a second perforation in the ticket when the ticket is punched and thereby indicating that the ticket has been registered. The plunger 19 is formed from a metallic rod which has its outer end portion 20 curved to extend substantially parallel to the handle 11 and normally held in an inoperative position by the spring 21 connected with the outer end portion of the rod 20 and engaging the bracket 22 which slidably supports the rod 20. This bracket 22 also affords means for pivotally mounting lever 23 which moves the rod 20 to an operative position when pressed by the thumb of the operator. In order to prevent the lever from moving in one direction beyond a desired amount there has been provided a heel 24 which fits into a slot formed in the end of the bracket 22 and engages the shoulder 25 when the lever is moved toward the handle 10.

The register 26 is of a conventional type which may be operated by a rocker shaft 27. This rocker shaft 27 passes through the bearing 28 and has one end journaled in the handle 10 as shown at 29 and is yieldably held in its normal position by the spring 30. In order to permit the shaft 27 to be rotated to operate the register 26 there has been provided a lug or finger 31 which carries a pin 32 extending toward the bracket 28. An actuating device is carried by the rod 20 and comprises a bracket 33 terminating in hinged ears 34 between which the notched plate 35 is pivotally mounted and yieldably held in a normal position by the spring 36.

When in use the punch is held in one hand with the thumb engaging the lever 23, thus permitting the lever to be easily moved to slide the rod toward the outer end of jaw 13 and cause the beveled end 37 of the rod to raise the pin 18 to an operative position. When a ticket is placed between the jaw 14 and plates 15 and the handles 10 and 11 moved to a closed position the lug 17 and pin 18 will pass through the ticket, thus punching the ticket in two places and indicating that the register was operated when the ticket was punched. It is obvious that if the lever 23 is not pressed when the ticket

is punched the pin 18 will not be advanced and therefore only one perforation will be formed in the ticket, thus indicating that the ticket was not registered when punched. When the lever 23 is moved to slide the rod 20 to an operative position the plate 35 will be moved toward finger 31 to such a position that the pin 32 will pass into notch 38 of the plate 35 when the handles 10 and 11 are closed. As the pin 32 is engaged by the plate 35 the finger 31 will be moved transversely of the handle 10, thus rotating the rocker shaft 27 and causing the register to be operated. The detail mechanism of the register has not been shown, since this register as herein shown simply indicates any conventional form of register which may be used. After the ticket has been punched and the handles released the spring 39 returns the handles to the open position shown in Fig. 1 and spring 30 returns the rocker shaft 27 to its normal position. The spring 21 will return rod 20 to the normal position shown in the drawings and spring 36 will return the plate to its normal position. This plate is, however, prevented from being moved beyond a desired position by the spring 36 by means of a tooth 40 formed at the inner end of the plate. This plate is provided so that when operating the punch the plate may follow the movement of finger 31 and is thus prevented from becoming disengaged from pin 32. Of course if it is not desired to register the tickets upon some special occasion the lever 23 does not need to be pressed and therefore the pin 18 will not be held in an operative position and cannot form a perforation in the ticket which is punched.

I claim—

1. A punch comprising pivotally mounted jaws terminating in operating handles, one of said jaws being provided with a stationary perforating element and with a movable perforating element, means for moving said movable perforated element into an operative position, and a register operated by said last mentioned means when the same is moved to a position to hold said movable perforating means in an operative position.

2. A punch comprising pivotally mounted jaws provided with operating handles, a movable perforating element carried by one of said jaws, means for moving and holding said movable perforating element in an operative position, a register provided with operating means carried by one of said handles, and means carried by the operating means of said movable perforating element for actuating the operating means of said register when said movable perforating element is held in an operative position.

3. A punch comprising jaws provided with operating handles, a movable marking element carried by one of said jaws, a register carried by one of said handles, and common means for holding said movable marking element in an operative position and actuating said register when said marking element is in an operative position.

4. A punch comprising jaws provided with operating means, a marking element movably carried by one of said jaws, a register carried by one of said operating means, and common means carried by the other of said operating means for releasably holding said marking means in an operative position and actuating said register when said marking means is in an operative position.

5. A punch comprising jaws provided with operating handles, one of said jaws being provided with a longitudinally extending passage and with a second passage communicating with said longitudinally extending passage, marking means movably mounted in said passage, a rod slidably connected with one of said handles and extending into said longitudinally extending passage, means for moving said rod to a position to engage said marking means and hold the same in an operative position, yieldable means for normally holding said rod in an inoperative position, a register carried by the other of said handles, and means carried by said rod for actuating said register when said rod is moved to hold said marking means in an operative position and said handles are moved to a closed position.

6. A punch comprising jaws provided with operating handles, a movable marker carried by one of said jaws, means for releasably holding said marking means in an operative position, said means being yieldably held in an inoperative position, a lever engaging the actuating means for said marking means to permit the same to be moved to an operative position, a register including a rocker shaft, a finger carried by said rocker shaft provided with a pin, a bracket carried by the actuating means of said marking means, a plate pivotally carried by said bracket for engaging said pin, and means for yieldably holding said plate in a normal position.

7. A punch comprising jaws provided with operating handles, marking means movably carried by one of said jaws, a rod slidably connected with one of said handles and yieldably held in a normal position, means for moving said rod to a position to engage said marking means and releasably hold the same in an operative position, a register carried by the other of said handles and including a rocker shaft yieldably held in a normal position, a support carried by said rocker shaft, a pin carried by said support, a bracket carried by said rod, a plate pivotally connected with said bracket for engaging said pin when said rod is moved to an operative position, and a spring for

yieldably holding said plate in a normal position.

8. A punch comprising jaws provided with operating handles, a pivotally mounted plate extending between said jaws, a movable marking element carried by one of said jaws, means for releasably holding said marking element in an operative position, a register, and means for operating said register when said marking means is held in an operative position.

In testimony whereof I affix my signature in presence of two witnesses.

SELAH E. GREENE.

Witnesses:
WADE M. JOHNSON,
BART KRUMPERMAN.