

(No Model.)

B. B. HILL.  
SELF INKING TIME AND DATING STAMP.

No. 410,589.

Patented Sept. 10, 1889.

Fig 1

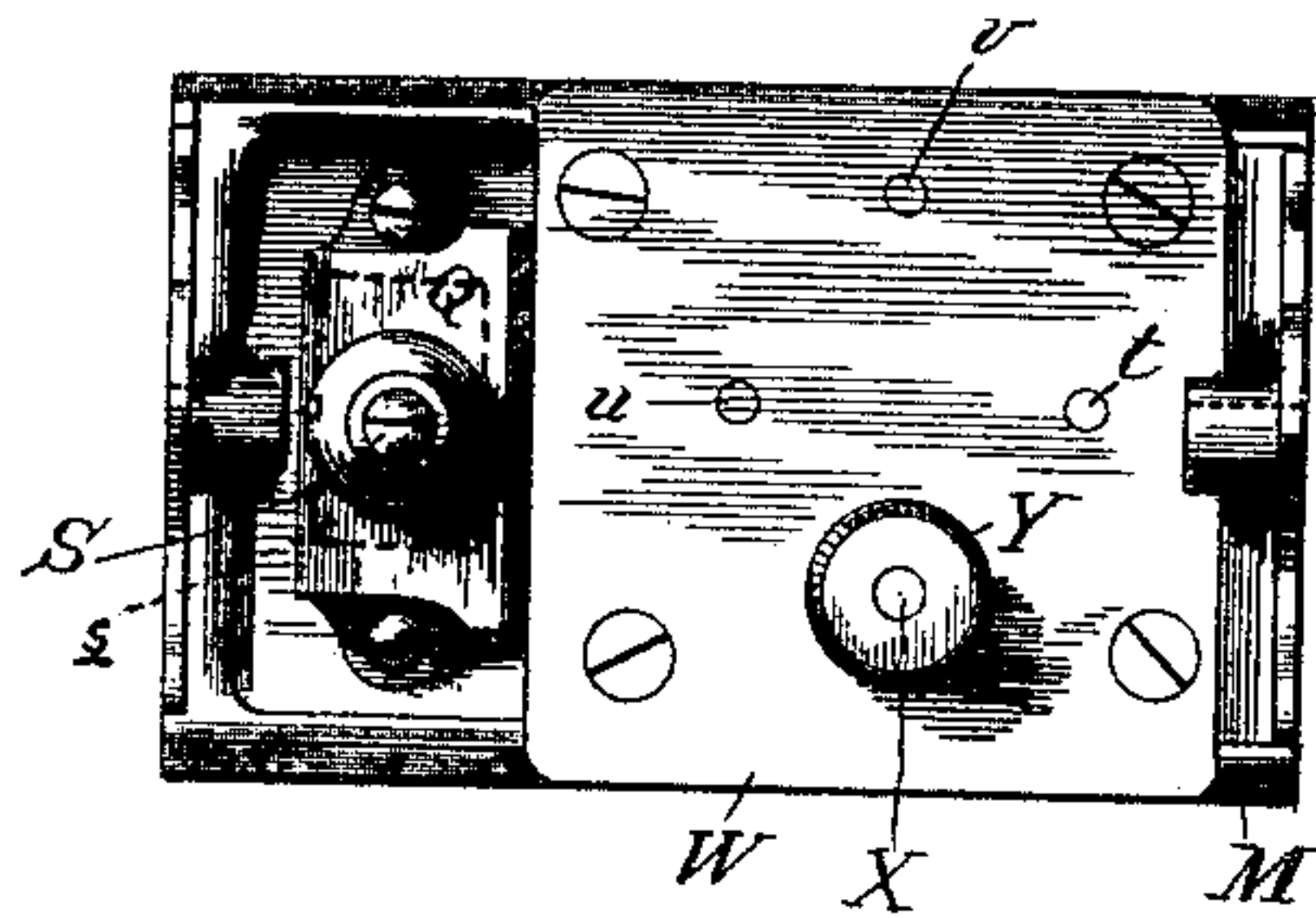


Fig 2.

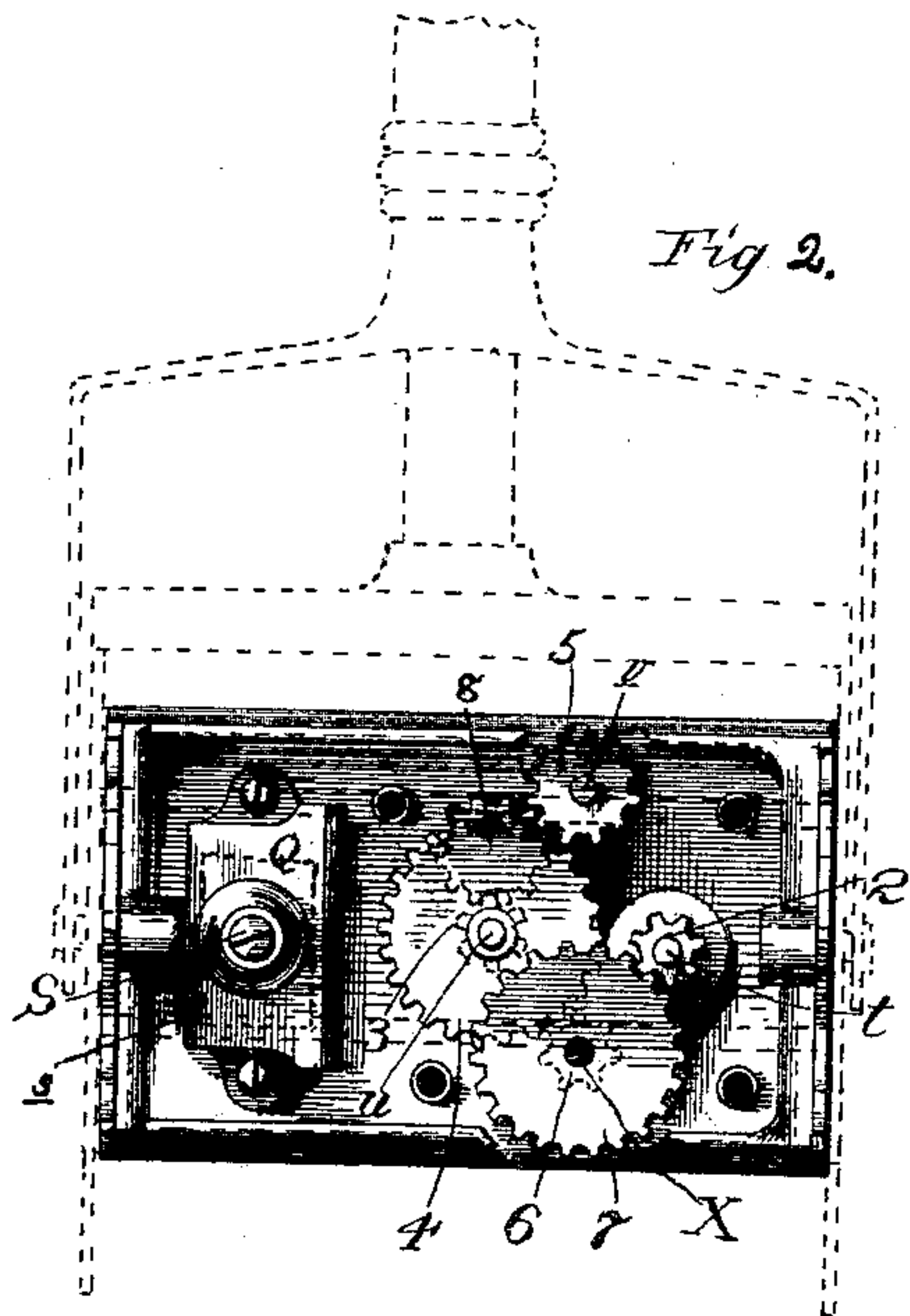


Fig. 3.

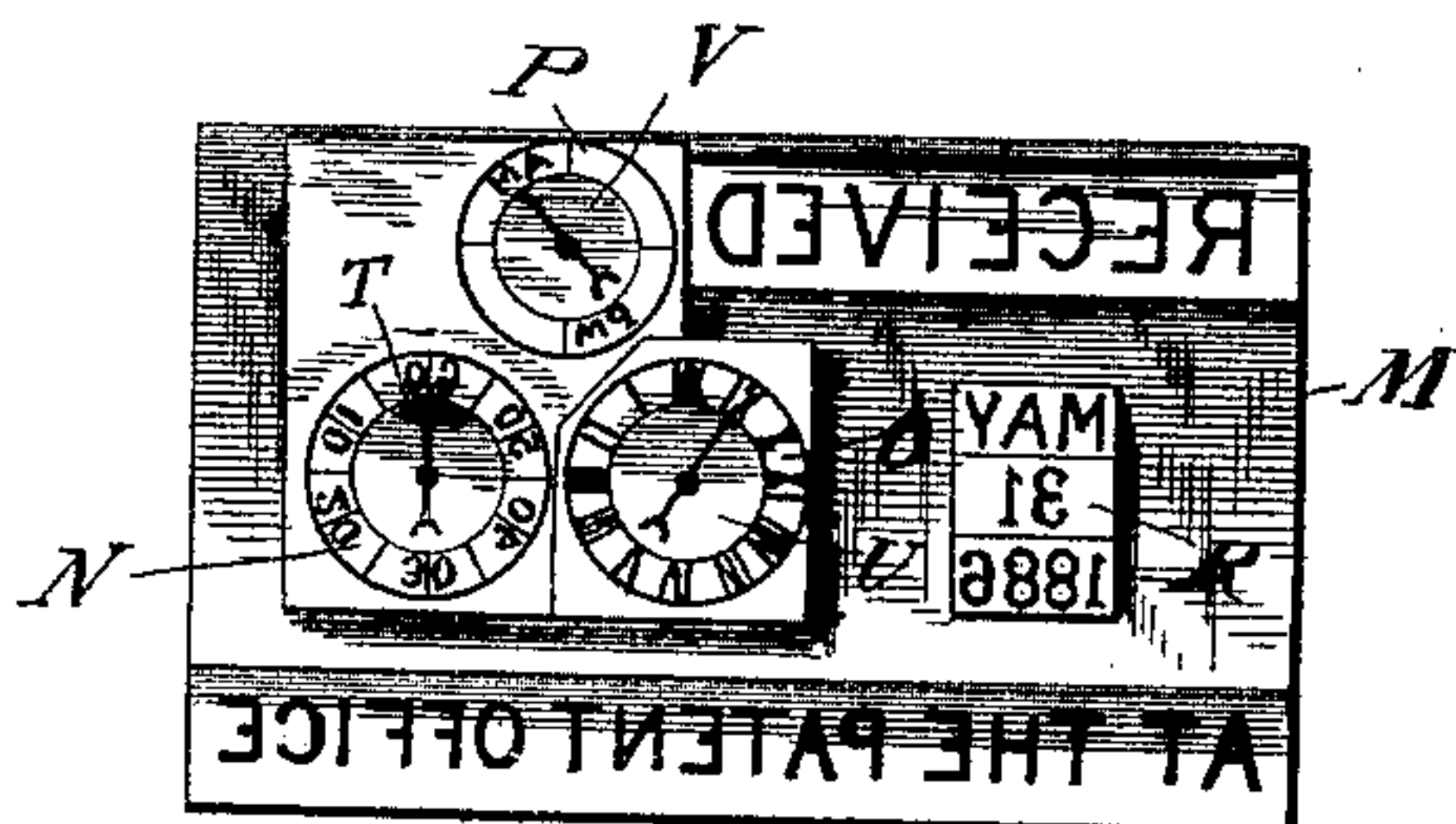
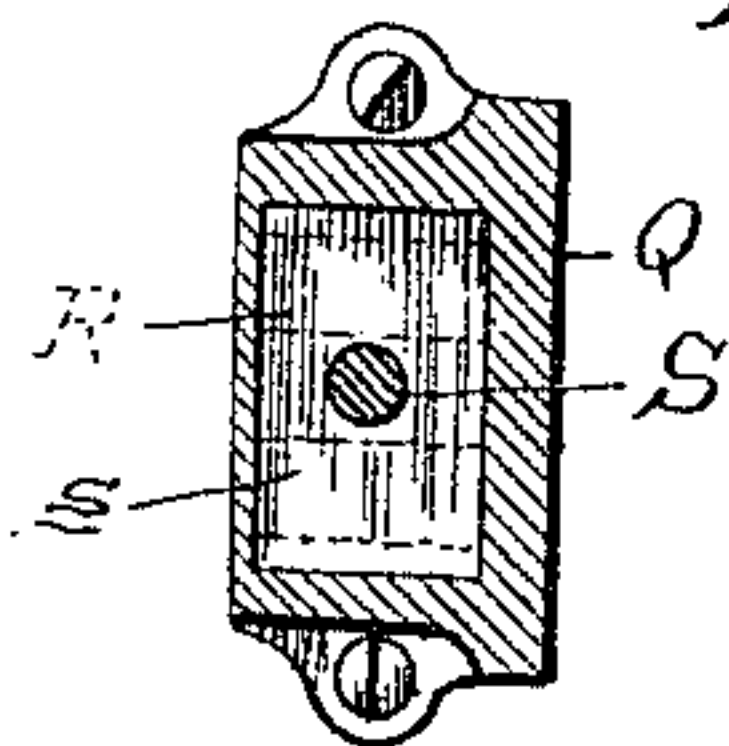


Fig 4.



Witnesses  
*E. H. Bond.*  
E. H. Bond.

Inventor  
*Benjamin B Hill*  
By his Attorney  
*J. W. Robertson*



# UNITED STATES PATENT OFFICE.

BENJAMIN B. HILL, OF PHILADELPHIA, PENNSYLVANIA.

## SELF-INKING TIME AND DATING STAMP.

SPECIFICATION forming part of Letters Patent No. 410,589, dated September 10, 1889.

Application filed February 16, 1887. Serial No. 227,811. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN B. HILL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Self-Inking Time and Dating Stamps, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a plan of the oscillating plate of a time-dating stamp; Fig. 2, a plan of the same with the cover removed; Fig. 3, a plan of the printing-face of the time-dating stamp, and Fig. 4 is a detail, partly in section, of the type-box.

This invention relates to that class of stamps called "self-inkers;" and the invention consists in the peculiar arrangement of parts whereby a self-inking dating or time-indicating stamp may be produced and the parts made very light, yet strong and durable.

Self-inking stamps have heretofore been made with type-wheels and rubber date-bands, but these necessitate that the permanent inscription or oscillating plate and its accessories—that is to say, the type-wheels or the bands and their supports, if the bands be used—shall be comparatively heavy and bulky, so as to have considerable inertia or momentum, and thus considerable jarring is effected when the parts are in motion. This is objectionable, as it soon causes the guides by which the plates are reversed to wear very fast, and when the wear once begins it increases very rapidly because the more play there is in the parts the greater the jar or pounding and the faster the wear.

For the sake of lightness and economy it is customary with many manufacturers to make the parts of these stamps of sheet metal, and it is therefore advisable that the pins on which the guides work that turn the oscillating plates run from side to side of the frame, so as to stiffen and brace the frame; but with this form of stamp type wheels or bands cannot be employed, as they would come in contact with the guide pins or rods if they run across from side to side. To avoid these difficulties and make the stamps light yet strong

and durable, I provide my oscillating plates with type-wheels or time-indicating disks having their axes at right angles to the face of the oscillating type-plates, whereby not only is the type-plate and its accessories made much lighter, but adjustable type-wheels may be employed, which will not come in contact with the guide pins or rods running from side to side of the frame. Moreover by this construction I am enabled to make a very cheap and durable self-inking time-indicating dater without the use of ribbons, separate inking-pads, or other objectionable inking apparatus.

Referring now to the details of the drawings, M represents the oscillating plate which carries the type, and which is shown in this case as bearing the words "Received" and "At the Patent Office," preferably formed on plates of vulcanized rubber. This plate also carries a plate of rubber having three rings of characters N O P, which have letters and figures like those shown in Fig. 3. Attached to the upper side of this plate is a type-box Q, in which are placed the movable type R, for the month, day of the month, and year, and which is adjusted with respect to the face of the other type by means of the set-screw S, which bears against a plate s, (shown in dotted lines in Figs. 2 and 3,) bearing on all the type in the type-box Q, and which as it is screwed in forces the type downward. In the face of this plate and flush with said rings of characters are three disks T U V, of rubber or other suitable material, each having an index or pointer, as shown, and each being cemented to a disk of metal set substantially flush with the fixed inscription-plate. Each of these disks is attached to a shaft, that carrying the index-plate T being attached to a shaft *t*, the disk carrying the index-plate U being attached to a shaft *u*, and the disk carrying the index-plate V having the shaft marked *v* attached to it.

On the shaft *t* is secured a pinion 2, on the shaft *u* a pinion 3 (shown in dotted lines) and a spur-wheel 4, while the shaft *v* carries a small spur-wheel 5. These are connected so as to move together, as follows: A shaft X, whose lower end extends through the covering-plate W and into the plate M, is provided



with a milled head or knob Y, by which the shaft can be easily turned. On this shaft and between plates M and W are secured a pinion 6 (shown in dotted lines) and a spur-wheel 7, which mesh, respectively, with the wheel 4 and the pinion 2, and the sizes of the various wheels and pinions are so arranged that the shaft *t*, which turns the disk carrying the index-plate T, which indicates the minutes, moves twelve times as fast as the index-plate U, which indicates the hours.

Between the wheel 4 and the plate M and revolving loosely on a stud secured to or cast with said plate is an idler-wheel 8, which meshes with the pinion 3 and the wheel 5 and consequently turns the latter. As the wheel 5 has twice as many teeth as the pinion 2, said wheel 5 only turns one-half as fast as the pinion 2, and hence the index-plate U revolves twice as fast as the index-plate V. This wheel-work is covered by the plate W, secured to the plate A by screws *w*, or in any suitable manner, which plate forms the bearing for those portions of the shaft that are above the wheels and pinions.

The operation of this device is as follows: When a paper is to be stamped, the receiving-clerk looks at the clock in the office and by turning the head or knob Y rapidly and easily turns the indices so as to make them correspond with the time shown by the clock. If, for instance, the time is 10.50 a. m., the knob Y is turned until the hour-index points 10, the minute-index to 50, and the meridian-index to a. m. The document is then stamped in the ordinary way of using self-ink-

ing stamps, and the stamp is set aside until the next document to be stamped is received, when the clerk, after noticing the time by the clock, again sets the indices and stamps the document as before.

By means of the construction here shown a durable and ever-ready self-inking time indicating and dating stamp is provided that, besides being cheaply made and self-inking, is so made that no amount of jarring in use will put it out of order.

What I claim as new is—

The combination, in a self-inking hand-stamp and with fixed inscription-plate thereof, of multiple printing-disks having their axes substantially at right angles to the face of the fixed inscription-plate, wheel-work connecting said disks, an oscillating box containing said wheel-work, having its top and bottom formed of the permanent inscription-plate of said stamp and a second plate secured thereto, said second plate being provided with bearings for the shafts of the wheel-work, and a shaft connected with the wheel-work passing through said second plate and provided with means, as the knob Y, for turning the shaft at the will of the operator, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 12th day of February, 1887.

BENJAMIN B. HILL.

Witnesses:

JOHN W. SPECKMAN,  
WILLIAM C. STOEVE.